point of compliance and the downgradient facility boundary. The Permittee shall implement corrective action beyond the facility property boundary, where necessary, to protect human health and the environment.

G.3 Well Location, Installation, Maintenance, and Removal

- (a) The Permittee's ground water monitoring system must consist of a sufficient number of wells, installed and screened at appropriate locations and depths to yield ground water samples from the fractured weathered shale zone which is considered to be the uppermost aquifer. A perched water zone has also been identified on site. The samples must:
 - (i) Represent the quality of background water that has not been affected by leakage from the units;
 - (ii) Represent the quality of ground water passing the point of compliance, between the point of compliance and the downgradient property boundary, and beyond the property boundary, where necessary, to protect human health and the environment;
 - (iii) Allow for the detection and measurement of contamination for all potential release pathways to the uppermost aquifer from the waste management units based on site-specific hydrogeologic characterization when hazardous constituents have migrated from the unit to the uppermost aquifer; and
 - (iv) Demonstrate the effectiveness of any corrective action program. The well system should be as effective in determining compliance with the GWCS and in determining the success of the monitored natural attenuation process.
- (b) The monitoring system consists of the ground water wells as specified on Figure E-1 found in the Permit Application and in conformance with the following list:

Well Identifier	Upgradient/ Downgradient	Purpose
MW-C	In unit	On-site Maximum
MW-A	Downgradient	POC
MW-B	Downgradient	POC
MW-G	Sidegradient	POC
MW-F	Upgradient	POC
MW-H	Sidegradient	POE
MW-J	Downgradient	POE
SW-2	Downgradient	POE
SW-3	Downgradient	POE
MW-E	Downgradient	POE
MW-I	Background	Background
SW-4	In unit	On-site Maximum

(c) Wells identified in Permit Condition G.3(b) must be cased in a manner that maintains the integrity of the monitoring well bore hole and complies with the detailed plans and specifications presented in Section E of the Permit Application. The casing must be screened and packed with gravel or sand, where necessary, to enable collection of ground water samples. The annular space above the sampling depth must be sealed to prevent contamination of samples and the ground water.

Section E of the Permit Application contains ground water monitoring well construction diagrams which illustrate compliance with this Permit Condition.

- (d) The Permittee must remove or replace any monitoring well in Permit Condition G.3(b) in accordance with the Appendix to OAC Rule 3745-50-51 permit modification process. Each change must be accompanied by a revised map as specified on Figure E-1 for Permit Condition G.3(b). Proper abandonment of wells shall be accomplished as specified in the revised Closure Plan, Section 4.2.4.
- (e) Whenever any of the wells specified in Permit Condition G.3(b) are replaced, the Permittee must demonstrate to Ohio EPA that the ground water quality

at the replacement well meets the criteria in Permit Condition G.3(a) within a two year time period of the date of replacement using means appropriate to the reason for replacement.

G.4 Sampling and Analysis Procedures

- (a) The Permittee must implement an IGWMP per Section E of the Permit Application. This program includes consistent sampling and analysis procedures designed to ensure monitoring results that provide a reliable indication of ground water quality below the units and is in compliance with this Permit Condition.
- (b) The Permittee's IGWMP per Section E of the Permit Application includes sampling and analytical methods that are appropriate for ground water sampling and that accurately measure hazardous constituents in ground water samples.
- (c) Field and analytical data must be validated in accordance with the procedures specified in Section E of the Permit Application.

G.5 Ground Water Surface Elevation

The Permittee must determine the ground water surface elevation at each well identified in the table in Permit Condition G.3(b) each time ground water is sampled using the methods in Section 4.2.4.1 of the Permit Application.

G.6 Sampling Frequency

Data on each hazardous constituent specified in Permit Condition G.2(a) will be collected from all wells listed in Permit Condition G.3(b). The sampling procedure and interval for each constituent is described in Section 4.2.4.2 of the Permit Application.

- (a) The number and kinds of samples collected to establish background must be appropriate for the form of statistical test employed, following generally accepted statistical principles.
- (b) The sample size must be as large as necessary to ensure with reasonable confidence that a contaminant release/increase in the ground water from a facility will be detected.
- (c) Background data may be updated as necessary in accordance with the

points outlined below to provide an accurate representation of background ground water quality. New or revised background values must be established in the permit through the permit modification process in OAC Rule 3745-50-51.

- (i) Analytical data from each well may be added to the background 95% UPL only in blocks of four or more statistically independent samples. A statistical outlier test followed by a trend test must be performed before data may be added to background. Due to semi-annual sampling, the Permittee may only update their intra-well background 95% UPL concentration limit every two years at the least.
- (ii) An outlier test using Dixon's test, for datasets of 25 data points or less, or Rosner's Test, for greater than 25 data points, or another test deemed acceptable by the Director, must be performed on the entire background dataset for each individual well. The statistical outlier test shall be performed at a 0.01 level of significance for each well contributing new data. Data points failing the outlier test shall be excluded from background.
- (iii) Once four or more new data points pass the outlier test, a statistical trend analysis shall be performed on the entire background dataset for each individual well using either Sens' Estimate of Slope, Spearman's Test, Mann-Kendall Test or another test deemed appropriate by the Director. The statistical trend test shall be performed at a 0.01 level of significance for each well. If a statistically significant increasing trend is identified, then the existing background data set shall not be updated unless the owner/operator submits a demonstration that the trend is not due to waste or waste-derived constituents from the regulated unit.
- (iv) The Permittee shall submit a demonstration documenting the outlier and trend analytical comparisons.

G.7 <u>Statistical Procedures</u>

The Permittee must use the following statistical procedures in evaluating ground water monitoring results for each hazardous constituent in Permit Condition G.2(a) in each well in Permit Condition G.3(b) to identify statistically significant evidence of increased contamination, the exceedance of the GWCS, and/or the effectiveness of corrective action:

- (a) For those constituents for which background values have not been collected and established at the time of Permit Application, the Permittee must choose and submit to Ohio EPA the appropriate statistical method within 45 days after the receipt of the last background sampling event data through the permit modification process in OAC Rule 3745-50-51.
 - For those constituents for which background values have been collected, the Permittee must conduct statistical procedures as presented in Section E of the Permit Application.
- (b) The Permittee's statistical procedures must be protective of human health and the environment, provide reasonable confidence that the increased concentration and migration of hazardous constituents from a unit into and through the aquifer will be indicated, and will determine whether such leakage of hazardous constituents into the ground water exceeds specified GWCS. The statistical procedures must comply with the following performance standards:
 - (i) The statistical evaluation of ground water monitoring data must be conducted separately for each hazardous constituent specified in Permit Condition G.2(a) in each well.
 - (ii) The statistical method must be appropriate for the distribution of the data used to establish background or GWCS. If the distribution for the constituents differ, more than one statistical method may be needed.
 - (iii) The statistical method must provide a reasonable balance between the probability of falsely identifying a non-contaminating and/or exceeding well and the probability of failing to identify a contaminating and/or exceeding well.
 - (iv) If a control chart approach is used, the specific type of control chart and its associated parameter values must be proposed by the Permittee and approved in the permit.
 - (v) If a prediction interval procedure is used, the levels of confidence and the percentage of the population that the interval must contain, must be proposed by the Permittee and approved in the permit. These parameters must be determined after considering the number of samples in the background data base, the data distribution, and the range of concentration values for each constituent of concern.

- (vi) The statistical method must account for data below the limit of detection with one or more statistical procedures. Any practical quantitation limit (PQL) approved in the permit that is used in the statistical method must be the lowest concentration level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions that are available to the Permittee.
- (vii) If necessary, the statistical method must include procedures to control or correct for seasonal and spatial variability as well as temporal correlation in the data.

G.8 Operating Record and Reporting

OAC Rules 3745-54-73, 3745-54-75, and 3745-54-77

(a) Operating Record

The Permittee must enter all of the following information obtained in accordance with Permit Module G. in the operating record:

- (i) Ground water monitoring data collected in accordance with this permit including actual levels of constituents.
- (ii) The laboratory results from each of the wells and their associated qualifiers including the laboratory sheets for the full volatile and semi-volatile analyses (must include method codes, method detection limits, and units of measurement);
- (iii) The date each well was sampled (tabulated);
- (iv) The date, time, and identification of all blanks and duplicates;
- (v) Any field log documentation of deviation from the procedures in Section E of the Permit Application, including documentation of parameter omissions during the sampling event;
- (vi) The date the Permittee received the results from the laboratory;
- (vii) The date the owner or operator completed their review of the analytical laboratory's verification of the accuracy and precision of the analytical data and determined its quality.

- (viii) The results of the data validation review per Permit Condition G.8(a)(vi) including: report completeness, chain of custody, sample receipt form, signed statement of validity, technical holding time review, data qualifiers including their definitions, dilutions, blank data, spikes, spike recovery %, surrogate recovery, and an explanation of any rejected results;
- (ix) Results of all blanks and duplicates (trip, field, equipment, and method);
- (x) Results of the field parameters;
- (xi) The statistical evaluation of the data (must include all computations, results of statistical tests, and date the statistical evaluation was completed);
- (xii) Any change in well status (i.e., going from unaffected to affected status and vice versa);
- (xiii) Ground water surface elevations taken at the time of sampling each well;
- (xiv) Data and results of the annual determination of the ground water flow rate and direction;
- (xv) The results of the last three years of all inspections required under OAC Rule 3745-54-15(D) related to ground water monitoring and equipment as required under OAC Rule 3745-54-73(B)(5).
- (xvi) Evaluation of the efficiency of any corrective actions performed to bring the ground water quality into compliance with the GWCS per Permit Condition G.2.

(b) Annual, Semi-Annual & Other Periodic Required Reporting

(i) Required Annual Reporting

The Permittee must submit an annual report to the Director by March 1st of the following year as specified in Section 4.2.4.3 of the Permit Application. The annual reports must reference the titles and dates of any other periodic reports required by the permit or any updates to

those reports, but generally do not need to include duplicates of hard copies previously submitted.

The annual reports must include, at a minimum, the analytical results required by Permit Conditions G.6 and G.9, the ground water elevation data required by Permit Condition G.5 and G.8(a)(xii)&(xiii), and the results of any statistical analyses required by Permit Condition G.7 and G.9. In addition, a copy on disk of all ground water and blank data must be submitted electronically in the format supplied by the Director, a hard copy of well-specific information (location (latitude and longitude), depth, construction, etc.) for any new/replacement wells, and any other information specified in the instructions for the annual report not addressed in this Permit Condition must be submitted in accordance with OAC Rules 3745-54-75.

(ii) Required Semi-Annual Reporting

The Permittee must report, in writing, <u>semi-annually</u> to the Director on the effectiveness of the corrective action program as specified in Section 4.2.4.3 of the Permit Application. These reports must be submitted on March 1 and September 1 of each year until the corrective action program has been completed. Each report must reference the titles and dates of any other periodic reports required by the permit or any updates to those reports, but generally does not need to include duplicates of hard copies previously submitted. The semi-annual reports must include, at a minimum, the analytical results required by Permit Conditions G.5, G.6, and G.9, and the results of the statistical analyses required by Permit Condition G.7.

(iii) Other Reports

The Permittee must comply with any other reporting requirements that become necessary under Permit Condition G.9 in accordance with the schedules covered by that permit condition and as required by OAC Rule 3745-54-77(C).

DEC 2 8 2006

- (a) The Permittee is required to establish and implement a ground water corrective action program under OAC Rule 3745-54-101 and must take corrective action, as necessary, to ensure that units are in compliance with the GWCS as specified in Permit Condition G.2.
- (b) The Permittee must implement, as necessary, a corrective action program that prevents hazardous constituents specified in Permit Condition G.2(a) from exceeding their respective GWCS specified in Permit Condition G.2(a) at the compliance point specified in Permit Condition G.2(b), between the compliance point and the downgradient property boundary, and beyond the property boundary during the permit period specified in Permit Condition G.2(c) by removing the hazardous constituents or by treating them in place.
- (c) The Permittee shall continue to implement monitored natural attenuation in the ground water as the remediation strategy with a contingency plan should natural attenuation fail per the April 2001 Revised RCRA Closure Plan & RCRA Corrective Measures Implementation Plan (CP/CMI) which was approved by Ohio EPA on June 12, 2001, and incorporated into the permit.
- (d) Contingency Plan Components
 - (i) First Level of Response:
 - (a) POC Wells: If a hazardous constituent listed in Permit Condition G.2(a) is detected above its GWCS listed in Permit Condition G.2(b) at a Point of Compliance well listed in Permit Condition G.2(c) and is confirmed, the Contingency Plan shall be implemented immediately. Ohio EPA will be notified within fourteen days of receipt of the confirmation. A confirmatory sampling event will be initiated immediately upon exceeding the GWCS concentration. The resampling event shall be completed within thirty (30) days or as soon as technically feasible. The concentration will be compared to the GWCS and if it again exceeds, the next level of the Contingency Plan will be initiated. If during re-sampling concentrations in excess of the respective GWCS are not confirmed, routine monitoring will be continued.
 - (b) POE Wells: If any hazardous constituent listed in Permit Condition G.2(a) is detected in a Point of Exposure well listed

in Permit Condition G.2(c) and confirmed, the Contingency Plan shall be implemented immediately for responsive corrective action. Ohio EPA shall be notified within fourteen days of receipt of the confirmation. Plumes of contamination may not be allowed to expand in size or concentration during post-closure. A confirmatory sampling event will be initiated immediately upon detection. The resampling event shall be completed within thirty (30) days or as soon as technically feasible. If concentrations are again detected, the next level of the Contingency Plan will be initiated. If during re-sampling concentrations are not confirmed, routine monitoring will be continued.

(c) If a GWCS is exceeded at SW-3, the Permittee shall install a ground water monitoring well downgradient of this location at the property boundary to evaluate whether contamination is leaving the site in this area. The initial sampling event shall be for the constituents listed in the Appendix to OAC Rule 3745-54-98 excluding herbicides and pesticides.

(ii) Second Level of Response:

- (a) Statistical Trend Analysis: A statistical trend analysis shall be performed on the entire dataset for each individual well that exceeded the GWCS using either Sens' Estimate of Slope, Spearman's Test, Mann-Kendall Test or another test deemed appropriate by the Director. The statistical trend test shall be performed at a 0.01 level of significance for each well. If a statistically significant increasing trend is identified, then the next level of the Contingency Plan will be initiated. If an increasing trend is not identified, the Permittee will resume the monitoring program in place prior to activation of the trigger.
- (b) Increased Monitoring Frequency: If an increasing trend is determined, then the monitoring frequency shall be increased to quarterly if at the time the frequency is less. Quarterly monitoring shall occur for a one-year period, during which time a report will be prepared to specify the contingency corrective actions proposed as a result of the trigger and increasing trend. Should it be deemed necessary to implement active

corrective actions, the Permittee will implement these measures within 60 days of approval from Ohio EPA.

(iii) Third Level of Response:

- (a) Oxygen Release Compound (ORC) and/or Hydrogen Release Compound (HRC): If an increasing trend is determined, the Permittee shall submit a proposal to Ohio EPA to enhance or supplement the natural attenuation process by utilizing ORC and/or HRC in downgradient monitoring wells and/or injecting it along the northern property boundary.
- (b) Extraction and Treatment: In the event that ORC and/or HRC do not demonstrate stable or decreasing concentrations of the constituents listed in Permit Condition G.2(b)(iv), and/or increasing end products, a proposal for a ground water extraction and treatment system will be submitted to Ohio EPA, and/or
- (c) The Permittee shall propose other active means of prohibiting the plume from increasing in size or concentration over the GWCS for approval by Ohio EPA.

(e) Reserved.

- (f) The Permittee must establish and implement a ground water monitoring program to demonstrate the effectiveness of the corrective action program. Ground water monitoring must be effective in determining compliance with the GWCS in Permit Condition G.2 and in determining the success of any corrective action program in this condition. The ground water monitoring program must include:
 - (i) Installation and maintenance of a ground water monitoring system at the compliance point as defined in Permit Condition G.2(b), and, as necessary to protect human health and the environment, between the compliance point and the downgradient property boundary and beyond the property boundary. The ground water monitoring system must comply with the requirements in Permit Condition G.3.
 - (ii) Collection, preservation, and analysis of samples pursuant to Permit Conditions G.4, G.5, and G.6. Statistical analysis must be conducted pursuant to Permit Condition G.7

(iii) The Permittee must conduct a semi-annual sampling program for each chemical parameter and hazardous constituent specified in Permit Condition G.2(a) from each well (background, POC and POE) specified in Permit Condition G.3(b) during the permit period and any extensions due to corrective action implementation.

Any additional sampling shall be taken at an interval (frequency) that assures, to the greatest extent feasible, that an independent sample is obtained, by reference to the uppermost aquifer's effective porosity, hydraulic conductivity, hydraulic gradient, and the fate and transport characteristics of the potential contaminants.

(iv) The Permittee shall compare the concentration of each hazardous constituent measured at each well specified in Permit Condition G.3(b) with its GWCS each time ground water quality is determined in accordance with the procedures specified in Permit Condition G.7.

Wells beyond the property boundary may be installed and sampled where necessary to protect human health and the environment, unless the Permittee demonstrates to the Agency that, despite the Permittee's best efforts, the Permittee was unable to obtain the necessary permission to undertake such action. The Permittee is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where off-site access is denied. On-site measures to address such releases will be determined on a case-by-case basis.

- (v) The Permittee must maintain a record of ground water analytical data as measured and in a form necessary for the determination of statistical increase under Permit Conditions G.7 and G.8 for the permit period.
- (vi) The Permittee must determine the ground water flow rate and direction in the uppermost aquifer at least annually using the procedures specified in Section E of the Permit Application.
- (vii) The Permittee has collected ground water samples from monitoring wells MW C, MW B, and MW I and submitted them for analysis of all constituents contained in Appendix to OAC Rule 3745-54-98,

excluding pesticides and herbicides, to determine whether additional hazardous constituents are present in the uppermost aquifer.

- (a) If the Permittee finds additional constituents present (i.e., not listed in Permit Condition G.2(a)), the Permittee must, if desired, re-sample the affected well(s) within one month for the detected constituent(s) in the Appendix to OAC Rule 3745-54-98. If the results of the second analysis confirm the presence of new hazardous constituents, then their concentrations must be reported to the Director in writing within seven (7) days from completion of the second analysis. If the Permittee chooses not to re-sample, then he or she must report the concentrations of the additional constituents to the Agency within seven days after completion of the initial analysis. Additional corrective action measures may be required and the Permittee must comply with Permit Condition G.9(a).
- (b) Within 90 days the Permittee must submit to Ohio EPA an application for a permit modification to incorporate the additional constituent(s) identified in Permit Condition G.9(f)(vii) into Permit Condition G.2(a). The application must include an identification of the concentration of each new Appendix to OAC Rule 3745-54-98 constituent detected at the compliance point and/or at any well downgradient between the compliance point and the downgradient property boundary and a proposed GWCS for each new constituent under Permit Condition G.2(a).
- (c) The Permittee must begin sampling and analyzing for the new constituents at the next regularly scheduled sampling event.

(g) Response Action

- (i) Based on the results of the Permittee's ground water monitoring program, the GWCS detailed in Permit Condition G.2(a) have not been exceeded. Therefore, the Permittee shall continue under routine IGWMP monitoring.
- (ii) Reserved.

Hukill Chemical Corporation HW Permit Renewal and Class 3 Permit Modification Page 79 of 79

- (iii) Reserved.
- (h) The Permittee must report in writing to the Director on the effectiveness of the corrective action monitoring program semi-annually according to Permit Condition G.8.
- (i) If the Permittee determines the corrective action program established by this permit no longer satisfies the requirements of OAC Rule 3745-54-101, the Permittee must, within ninety (90) days of that determination, submit an application for a permit modification per OAC Rule 3745-50-51 to make any appropriate changes to the program.

END OF PERMIT CONDITIONS

December 12, 2006 (12:44pm) Cls3.PermitPage.JA.JC_jms.wpd

OHIO ENVIRONMENTAL PROTECTION AGENCY

OHIO HAZARDOUS WASTE FACILITY INSTALLATION AND OPERATION PERMIT RENEWAL/REVISION

Permittee:

Hukill Chemical Corporation

Facility:

Hukill Chemical Corporation

7013 Krick Road

Bedford, Ohio 44146

Owner:

Hukill Chemical Corporation

7013 Krick Road Bedford, Ohio 44146

Operator:

Hukill Chemical Corporation

7013 Krick Road Bedford, Ohio 44146

Location:

7013 Krick Road

Bedford, Ohio 44146

Ohio Permit No.:

02-18-0315

US EPA ID:

OHD 001 926 740

Issue Date:

/ / 10/30/1998

Effective Date:

/ / 10/30/1998

Expiration Date:

/ / 10/30/2003

AUTHORIZED ACTIVITIES

In reference to the application of Hukill Chemical Corporation, for an Ohio Hazardous Waste Facility Installation and Operation Renewal Permit under Ohio Revised Code (ORC) Chapter 3734 and the record in this matter, you are authorized to conduct at the above-named facility the following hazardous waste management activities:

Storage in containers and tanks.

PERMIT APPROVAL

Donald R. Schregardus, Director

Ohio Environmental Protection Agency

This permit approval is based upon the record in this matter which is maintained at the offices of the Ohio Environmental Protection Agency. The Director has considered the application, accompanying information. inspection reports of the facility, a report regarding the facility's compliance or noncompliance with the terms and conditions of its permit and rules adopted by the Director under this chapter, and such other information as is relevant to the operation of the facility. The Director has determined that the facility under the existing permit has a history of compliance with ORC Chapter 3734, rules adopted under it, the existing permit, or orders entered to enforce such requirements that demonstrate sufficient reliability, expertise, and competency to operate the facility henceforth under this chapter, rules adopted under it, and the renewal permit.

Entered in to the Journal of the Director this 30th day of October

of the Ohio Environmental Protection Agency.

to hala time and accurate copy of the official document as filed in the records of the Ohio Environmental Protection Agency.

Unex 000 10.30.98

OCT 30 98

A. GENERAL PERMIT CONDITIONS

A.1. Effect of Permit

ORC Sections 3734.02 (E) and (F) and 3734.05, OAC Rule 3745-50-58(G)

- (a) The Permittee is authorized to store hazardous waste in containers and tanks in accordance with the terms and conditions of this permit, Attachment A, ORC Chapter 3734, all applicable Ohio hazardous waste rules, all applicable regulations promulgated under the Resource Conservation and Recovery Act (RCRA), as amended, and the approved hazardous waste facility installation and operation permit renewal application, as such application has been revised and supplemented and as such application may be revised or modified pursuant to the hazardous waste rules. The approved Part B permit application as submitted to Ohio EPA on September 6, 1988 and any subsequent amendments thereto, and last updated on July 6, 1998 is hereby incorporated into this permit. In the instance of inconsistent language or discrepancies between the above, the language of the more stringent provision shall govern.
- (b) Any management of hazardous waste not authorized by this permit is prohibited, unless otherwise expressly authorized or specifically exempted by law. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, or invasion of other private rights. Compliance with the terms and conditions of this permit does not obviate Permittee's obligation to comply with other applicable provisions of law governing protection of public health or the environment including but not limited to the Community Right to my law under ORC Chapter 3750.

A.2. Permit Actions OAC Rule 3745-50-58(F)

This permit may be modified, revoked, suspended, or renewed as specified by Ohio law. The filing of a request for a permit modification, revocation, suspension, or renewal or the notification of planned changes or anticipated noncompliance on the part of the Permittee, does not stay the applicability or enforceability of any permit term or condition.

A.3. Permit Effective/Expiration Date OAC Rule 3745-50-54

The effective date of this permit is the date the permit is entered into the Director's Journal. The permit expiration date is five years after the date of journalization of this permit.

A.4. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the

application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

A.5. <u>Duty to Comply</u> OAC Rule 3745-50-58(A)

The Permittee shall comply with all applicable provisions of ORC Chapter 3734, all applicable Ohio hazardous waste rules, and all terms and conditions of this permit, except to the extent and for the duration such noncompliance is authorized by the laws of the State of Ohio. Any permit noncompliance, other than noncompliance authorized by the laws of the State of Ohio, constitutes a violation of ORC Chapter 3734 and the rules adopted thereunder and is grounds for enforcement action, suspension, revocation, modification, denial of a permit renewal application or other appropriate action.

- A.6. <u>Duty to Reapply and Permit Expiration</u>
 OAC Rules 3745-50-40(E), 3745-50-58(B), 3745-50-56 and ORC Section 3734.05(H)
 - (a) If the Permittee wishes to continue an activity allowed by this permit after the expiration date of this permit, the Permittee must submit a completed application for a hazardous waste facility installation and operation permit renewal and any necessary accompanying general plans, detailed plans, specifications, and such information as the Director may require, to the Director no later than one hundred eighty (180) days before to the expiration date of this permit or upon approval of the director a later date prior to the expiration date if the Permittee can demonstrate good cause for late submittal.
 - (b) The Permittee may continue to operate in accordance with the terms and condition of the expired permit until a renewal permit is issued or denied if:
 - (i) the Permittee has submitted a timely and complete application for a renewal permit under OAC Rule 3745-50-40; and
 - (ii) through no fault of the Permittee, a new permit has not been issued pursuant to OAC Rule 3745-50-40 on or before the expiration date of this permit.
 - (c) The corrective action obligations contained in this permit will continue regardless of whether the facility continues to operate or ceases operation and closes. The Permittee is obligated to complete facility-wide corrective action under the conditions of this permit regardless of the operational status of the facility. The Permittee must submit an application for permit reissuance at least 180 days before the expiration date of this permit pursuant to OAC Rule 3745-50-40(D) unless a) the permit has been modified to terminate the corrective action schedule of compliance and the Permittee has been released from the requirements for financial assurance for corrective action; or b) permission for a later date has been granted by the Director. The Director shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

A.7. Need to Halt or Reduce Activity Not a Defense OAC Rule 3745-50-58(C)

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce a permitted activity in order to maintain compliance with the conditions of this permit.

A.8. <u>Duty to Mitigate</u> OAC Rule 3745-50-58(D)

The Permittee shall expeditiously take all reasonable steps necessary to minimize or correct any adverse impact on the environment or the public health resulting from noncompliance with the conditions of this permit.

A.9. <u>Proper Operation and Maintenance</u> OAC Rule 3745-50-58(E)

The Permittee shall at all times properly operate and maintain the facility (and related appurtenances) to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes, but is not limited to, effective management practices, adequate funding, adequate operator staffing and training, and where appropriate, adequate laboratory and process controls, including appropriate quality assurance/quality control procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the terms and conditions of this permit.

A.10. <u>Duty to Provide Information</u> OAC Rule 3745-50-58(H)

The Permittee shall furnish the Director, within a reasonable time, any relevant information which the Director may request to determine whether cause exists for modifying, revising, revoking or suspending this permit or to determine compliance with this permit. The Permittee shall also furnish the Director, upon request, copies of records required to be kept by this permit.

A.11. <u>Inspection and Entry</u> OAC Rule 3745-50-58(I), 3745-50-30 and ORC Section 3734.07

- (a) The Permittee shall allow the Director, or an authorized representative, upon stating the purpose and necessity of the inspection and upon proper identification to:
 - (i) enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the terms and conditions of this permit;

OHIO E.P.A.

OCT 30 98

- (ii) have access to and copy, at reasonable times, any records required to be kept under the terms and conditions of this permit;
- (iii) inspect and photograph at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under the terms and condition of this permit; and
- (iv) sample, document, or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by ORC Chapter 3734 and the rules adopted thereunder, any substances or parameter at any location.
- (b) Any record, report or other information obtained under the hazardous waste rules or Chapter 3734 of the Ohio Revised Code shall not be available to the public upon the Permittee's satisfactory showing to Ohio EPA that all or part of the information would divulge methods or processes entitled to protection as trade secrets pursuant to Ohio Trade Secret Law and OAC Rule 3745-50-30.

A.12. Monitoring and Records OAC Rule 3745-50-58(J)

- (a) Any sample and measurement taken for the purpose of monitoring shall be a representative sample or measurement, as such term is defined and used in the Ohio hazardous waste rules. The method used to obtain a representative sample of the waste to be analyzed must be the appropriate method from Appendix I of OAC Rule 3745-51-20, Laboratory Methods. Laboratory methods must be those specified in Test Methods for the Evaluation of Solid Waste: Physical /Chemical Methods; SW-846: Third Edition, November 1992; and additional supplements or editions thereof; Standard Methods for the Examination of Water and Wastewater: Seventeenth Edition, 1989; or an equivalent method as specified in the approved waste analysis plan, or as such term is defined and used in the Ohio hazardous waste rules.
- (b) Records of monitoring information shall specify the:
 - (i) date(s), exact place(s), and time(s) of sampling or measurements;
 - (ii) individual(s) who performed the sampling or measurements;
 - (iii) date(s) analyses were performed;
 - (iv) individual(s) who performed the analyses;
 - (v) analytical technique(s) or method(s) used; and
 - (vi) results of such analyses.

OHIO E.P.A.

OCT 30 98

A.13. Signatory Requirement and Certification of Records OAC Rule 3745-50-58(K) and 3745-50-42

All applications, reports or information shall be properly signed and certified in accordance with OAC Rule 3745-50-58(K).

A.14. Retention of Records

OAC Rules 3745-50-58(J) and 3745-50-58(M)

- (a) The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by this permit, the certification required by OAC Rule 3745-54-73 B(9), and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date of the sample, measurement, report, certification, or application.
- (b) The record retention period may be extended by request of the Director at any time and are automatically extended during the course of any unresolved enforcement action regarding the facility.
- (c) The Permittee shall maintain, in accordance with the Ohio hazardous waste rules, records of all data used to complete the Part B permit application and any amendments, supplements or modifications, of such application and shall retain a complete copy of the application for the life of the facility.
- (d) The Permittee shall maintain records from all ground water monitoring wells and associated ground water surface elevations for the active life of the facility, and for disposal facilities for the post-closure care period as well.
- (e) Corrective Action records must be maintained at least 3 years after all Corrective Action activities have been completed.

A.15. Planned Changes

OAC Rules 3745-50-51 and 3745-50-58(L)(1)

The Permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. All such changes must be made in accordance with OAC Rule 3745-50-51.

A.16. Waste Shipments

OAC Rule 3745-52-12, ORC 3734.15(C)

The Permittee shall only use properly registered transporters of hazardous waste to remove hazardous waste from the facility, in accordance with all applicable laws and rules.

OHIO E.P.A.

OCT 30 98

Hukill Chemical Corporation Part B Permit Conditions Page 7 of 50

A.17. Anticipated Noncompliance OAC Rule 3745-50-58(L)(2)

The Permittee shall give advance notice to the Director of any planned changes in the permitted facility or operations which may result in noncompliance with the terms and conditions of this permit. Such notification does not waive the Permittee's duty to comply with this permit pursuant to Condition A.5.

A.18. Transfer of Permits

OAC Rules 3745-50-52, 3745-50-58(L)(3) and 3745-54-12

- (a) This permit is not transferable to any person except after notice of the Director.
- (b) The permit may be transferred to a new owner or operator only if such transfer is conducted in accordance with ORC Chapter 3734 and the rules adopted thereunder. This permit may be transferred by the Permittee to a new owner or operator only if the permit has been modified under OAC Rule 3745-50-51. Before transferring ownership or operation of the facility the Permittee shall notify the new owner or operator in writing of the requirements of ORC Chapter 3734 and the rules adopted thereunder (including all applicable corrective action requirements).
- (c) The Permittee's failure to notify the new owner or operator of the requirements of the applicable Ohio law or hazardous waste rules does not relieve the new owner or operator of its obligation to comply with all applicable requirements.

A.19. <u>Compliance Schedules</u> OAC Rules 3745-50-58(L)(5) and 3745-50-50

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule (developed in accordance with OAC Rule 3745-50-50) of this permit shall be submitted to the Director no later than fourteen (14) days following each scheduled date.

A.20. Immediate Reporting of Noncompliance OAC Rule 3745-50-58(L)(6)

- (a) The Permittee shall report orally to the Ohio Environmental Protection Agency's Division of Emergency and Remedial Response within two hours from the time the Permittee becomes aware of any noncompliance with this permit, ORC Chapter 3734 or the rules adopted thereunder, which endangers human health or the environment, including:
 - information concerning the release of any hazardous waste that may cause an endangerment to public drinking water supplies; and

OCT 30 98

- (ii) any information of a release or discharge of hazardous waste or a fire or explosion from the hazardous waste facility, which could threaten the environment or human health outside the facility.
- (b) The report shall consist of the following information (if such information is available at the time of the oral report):
 - (i) name, address, and telephone number of the owner or operator;
 - (ii) name, address, and telephone number of the facility;
 - (iii) name and quantity of material(s) involved;
 - (iv) the extent of injuries, if any;
 - (v) an assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and
 - (vi) estimated quantity and disposition of recovered material that resulted from the incident.

A.21. Follow-Up Written Report of Noncompliance OAC Rule 3745-50-58(L)(6)(c)

- (a) A written report shall also be provided to the Ohio Environmental Protection Agency's Division of Emergency and Remedial Response and the Division of Hazardous Waste Management, Northeast District Office within five (5) days of the time the Permittee becomes aware of the circumstances reported in Condition A.20.
- (b) The written report shall address the items in A.20 and shall contain a description of such noncompliance and its cause; the period(s) of noncompliance (including exact dates and times); whether the noncompliance has been corrected; and, if not, the anticipated time it is expected to continue; and steps taken or planned to minimize the impact on human health and the environment and to reduce, eliminate, and prevent recurrence of the noncompliance.
- (c) The Permittee need not comply with the five (5) day written report requirement if the Director, upon good cause shown by the Permittee, waives that requirement and the Permittee submits a written report within fifteen (15) days of the time the Permittee becomes aware of the circumstances.

OHIO E P.A

OCT 30 98

Hukill Chemical Corporation Part B Permit Conditions Page 9 of 50

A.22. Other Noncompliance

OAC Rules 3745-50-58(L)(10) and 3745-50-58(L)(4)

The Permittee shall report to the Director, all other instances of noncompliance not provided for in Condition A.20. These reports shall be submitted within a month of the time at which the Permittee is aware of such noncompliance. Such reports shall contain all information set forth within Condition A.20 of this permit.

A.23. Other Information

OAC Rule 3745-50-58(L)(11)

If at any time the Permittee becomes aware that it failed to submit any relevant facts, or submitted incorrect, misleading, or incomplete information to the Director, the Permittee shall promptly submit such facts, information or corrected information to the appropriate entity.

A.24. Confidential Information

OAC Rule 3745-50-30

In accordance with ORC Chapter 3734 and the rules adopted thereunder, the Permittee may request confidentiality of any information required to be submitted by the terms and conditions of this permit, including any information obtained by the Director, or an authorized representative, pursuant to the authority provided under condition A.11 of this permit.

A.25. Ohio Annual Permit Fee

OAC Rule 3745-50-36

The annual permit fee, calculated pursuant to OAC Rule 3745-50-36 and payable to the Treasurer of the State, shall be submitted to the Director on or before the anniversary of the date of issuance during the term of the permit. For the purpose of the payment of the Ohio Annual Permit Fee, the date of issuance is the date the permit was entered into the Journal of the Director of the Ohio Environmental Protection Agency.

A.26. Compliance Schedule - Documents

(a) The approved Part B permit application as submitted to Ohio EPA on September 6, 1988 and any subsequent amendments thereto, and last updated on July 6, 1998, is incorporated into this permit. The Permittee shall submit to Ohio EPA within sixty (60) days after permit journalization, a consolidated Part B permit application which includes only those units which are being permitted, in this renewal/revision permit, for the storage of hazardous waste or those units which are necessary for recycling, reclaiming, and/or fuels-blending operations. This consolidated application shall not include the proposed modifications to the facility.

OHIO E.P.A.

OCT 30 98

(b) The Permittee has submitted a closure/post-closure plan for the former tank farm area and the underground cistern to Ohio EPA. The revised closure/post-closure plan was submitted to address deficiencies noted in the Director's March 2, 1993 notice of deficiency letter. The closure plan was received by Ohio EPA on February 17, 1994. Ohio EPA provided draft comments to the Permittee by letter dated April 10, 1997.

On July 6, 1998, Ohio EPA received a document from Leader Environmental, Inc. (Leader) dated June 30, 1998. The document is an alternative remediation strategy, the "RCRA Closure Plan and Groundwater Corrective Action Proposal", for closure of the underground tank farm and cistern. This plan was submitted in response to meetings in which Ohio EPA, Leader, and the Permittee met to discuss outstanding closure issues.

- (i) The Permittee shall meet with Ohio EPA Northeast District Office within fortyfive (45) days of the issuance of this permit. The purpose of this meeting is for Ohio EPA and the Permittee to discuss the review comments on the February 17, 1994 submittal which are outlined in Attachment A of this permit and to discuss the June 30, 1998, proposal submitted by Leader. Comments regarding the Leader proposal will be provided to the Permittee prior to the meeting such that the comments may be addressed by the Permittee and their consultant;
- (ii) Within ninety (90) days of meeting with Ohio EPA, the Permittee shall submit the first submittal of the closure plan addressing the comments outlined in Attachment A of this permit and/or the comments generated from Ohio EPA's review of the "RCRA Closure Plan and Groundwater Corrective Action " proposal, and any revisions agreed upon during the meeting.
- (iii) The Permittee shall submit an approvable closure plan within 270 days of the issuance of this permit; and
- (iv) If the Permittee should need an extension of time, the Permittee may submit to the Director a C1A modification request.

Unless specified otherwise, the Permittee shall submit the required documents to:

Ohio EPA, DHWM
Attn: Data Management Section
1800 WaterMark Drive
Columbus, Ohio 43216-1049

Ohio EPA, DHWM Northeast District Office 2110 East Aurora Road Twinsburg, Ohio 44087

OHIO E.P.A.

OCT 30 98

A.27. Information to be Maintained at the Facility OAC Rule 3745-54-74

- (a) The Permittee shall maintain at the facility, until closure of the facility is completed and certified by an independent, qualified, registered professional engineer, pursuant to OAC Rule 3745-55-15, and until the Director releases the Permittee from financial assurance requirements pursuant to OAC Rule 3745-55-47, the following documents (including amendments and modifications):
 - (i) waste analysis plan, developed and maintained in accordance with OAC Rule 3745-54-13 and the terms and conditions of this permit;
 - (ii) contingency plan developed and maintained in accordance with OAC Rule 3745-54-53 and the terms and conditions of this permit;
 - (iii) closure plan, developed and maintained in accordance with OAC Rule 3745-55-12 and the terms and conditions of this permit;
 - (iv) cost estimate for facility closure developed and maintained in accordance with OAC Rule 3745-55-42 and the terms and conditions of this permit;
 - (v) personnel training plan and the training records, as developed and maintained in accordance with OAC Rule 3745-54-16 and the terms and conditions of this permit;
 - (vi) operating record required by OAC Rule 3745-54-73 and the terms and conditions of this permit;
 - (vii) inspection schedules developed in accordance with OAC Rules 3745-54-15; 3745-55-74 and 3745-55-95; and the terms and conditions of this permit;
 - (viii) Post-Closure Plan, as required by OAC Rule 3745-55-18(A) and this Permit;
 - (ix) annually-adjusted cost estimate for facility closure and post-closure, as required by OAC Rules 3745-55-42 and 3745-55-44 and this Permit; and
 - (x) all other documents required by this Permit.
- (b) All amendments and modifications to any plan required by the terms and conditions of this permit or the Ohio hazardous waste rules shall be submitted to the Director. No such change shall be made unless the Permittee has received approval in accordance with the Ohio hazardous waste rules.

OHIO E.P.A

OCT 30 98

Hukill Chemical Corporation Part B Permit Conditions Page 12 of 50

- (c) The Permittee shall maintain copies of all inspection logs at the facility for a period of not less than three (3) years from the date of inspection.
- (d) Corrective Action reports and records as required by Condition A.14 and Permit Module G of this permit. These reports and records must be maintained for at least 3 years after all Corrective Action Activities have been completed.

A.28. Waste Minimization Report OAC Rule 3745-54-73

- (a) The Permittee shall submit a Waste Minimization Report describing the waste minimization program required by OAC Rules 3745-54-75(H), (I), and (J); 3745-54-73(B)(9); and 3745-52-20(B) at least once every two years. The provision of OAC Rules 3745-54-75(H), (I) and (J); and 3745-54-73(B)(9) must be satisfied annually.
- (b) In completing this report, the Permittee should refer to the following information: instructions prepared by the Ohio EPA for completing the Waste Minimization Annual Report required by OAC Rules 3745-54-75(H), (I), and (J); the Federal Register notice of May 28, 1993, vol. 58, p. 31114, "Interim Final Guidance: Guidance to Hazardous Waste Generators on the Elements of a Waste Minimization Program"; and U.S. EPA's "Facility Pollution Prevention Guide," (EPA/600/R-92/088) May 1992, and any subsequent updates.

The Waste Minimization Report prepared by the Permittee should incorporate the phases outlined in the "Facility Pollution Prevention Guide," including planning and organization, assessment, feasibility analysis, implementation, measuring progress, and maintaining the program.

(c) The Permittee shall submit the Waste Minimization Report to the Office of Pollution Prevention, Ohio Environmental Protection Agency, 1800 Watermark Drive, Columbus, Ohio 43216-1049, within one hundred eighty (180) days of journalization of this permit, and shall submit updates to this report biennially thereafter.

OHIO E.P.A.

OCT 30 98

B. GENERAL FACILITY CONDITIONS

B.1. <u>Design, Maintenance and Operation of Facility</u> OAC Rule 3745-54-31

- (a) The Permittee shall design, construct, maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste constituents to air, soil, and ground or surface waters which could threaten human health or the environment.
- (b) The Permittee shall not accept more than 347,679 tons in any one calendar year from any off-site sources during the life of the permit, until such time as this Condition is modified or renewed. This is a facility wide limitation and includes all units.

B.2. Required Notices OAC Rule 3745-54-12

- (a) The Permittee shall notify the Director in writing at least four weeks in advance of the date the Permittee expects to receive hazardous waste from a foreign source, as required by OAC Rule 3745-54-12(A). Notice of subsequent shipments of the same waste from the same foreign source is not required.
- (b) When the Permittee is to receive hazardous waste from an off-site source (except where the Permittee is also the generator), he must inform the generator in writing that he has the appropriate Permits, and will accept the waste the generator is shipping. The Permittee must keep a copy of this written notice as part of the operating record.

B.3. General Waste Analysis Plan OAC Rule 3745-54-13

The Permittee shall follow the procedures described in the approved waste analysis plan found in Section C of the approved Part B permit application and the terms and conditions of this permit.

The Permittee shall verify the analysis of each waste stream annually as part of its quality assurance program, in accordance with Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, U.S. EPA Publication SW-846, or equivalent methods approved by the Director. At a minimum, the Permittee shall maintain proper functional instruments, use approved sampling and analytical methods, verify the validity of sampling and analytical procedures, and perform correct calculations. If the Permittee uses a contract laboratory to perform analyses, then the Permittee shall inform the laboratory in writing that it must operate under the waste analysis conditions set forth in this Permit.

OHIO E.P.A.

OCT 30 98

Hukill Chemical Corporation Part B Permit Conditions Page 14 of 50

B.4. <u>Security</u> OAC Rule 3745-54-14

The Permittee shall comply with the security provisions of OAC Rule 3745-54-14(B)(2) and (C) and Section F of the Part B permit application.

B.5. <u>General Inspection Requirements</u> OAC Rules 3475-54-15 and 3745-54-73

The Permittee shall follow the inspection schedule set out in Section F of the approved Part B permit application. The Permittee shall remedy any deterioration or malfunction discovered by an inspection, as required by OAC Rule 3745-54-15(C). Records of inspection shall be kept for a minimum of three years from the date of inspection.

B.6. Personnel Training OAC Rule 3745-54-16

The Permittee shall conduct personnel training, as required by OAC Rule 3745-54-16. This training program shall contain at least the elements set forth in the Section H of the approved Part B permit application. The Permittee shall maintain training documents and records as required by OAC Rules 3745-54-16(D) and (E).

B.7. General Requirements for Ignitable, Reactive, or Incompatible Waste OAC Rule 3745-54-17

- (a) The Permittee shall comply with the requirements of OAC Rule 3745-54-17 and shall follow the procedures for handling ignitable, reactive, and incompatible wastes set forth in Section D of the approved Part B permit application.
- (b) The Permittee shall provide electrical grounding for all containers and tanks, and transport vehicles during all operations involving the handling of ignitable or reactive wastes.
- (c) The Permittee shall provide, and require the use of, spark proof tools during all operations involving the handling of all ignitable or reactive wastes.
- (d) The Permittee shall prohibit smoking and open flames in each area where ignitable, reactive or incompatible hazardous wastes are managed, and shall post appropriate signs.
- (e) All wiring and electrical equipment at the facility shall meet the National Fire Protection Association's standards for hazardous locations (See National Fire Protection Association, "National Electric Code" National Fire Codes, 1985 Edition, Vol. 3, Chapter 5, Special Occupancies, Articles 500-503, pp.176 through 189).

OHIO E.P.A.

OCT 30 98

Hukill Chemical Corporation Part B Permit Conditions Page 15 of 50

B.8. Required Equipment OAC Rule 3745-54-32

At a minimum, the Permittee shall maintain at the facility all the equipment required by OAC Rule 3745-54-32 and the equipment set forth in the approved contingency plan contained in Section G of the approved Part B permit application.

B.9. <u>Testing and Maintenance of Equipment</u> OAC Rule 3745-54-33

The Permittee shall inspect, test and maintain the equipment required by Condition B.8. as necessary to assure its proper operation in time of emergency, as specified in OAC Rule 3745-54-33, Section F of the approved Part B permit application, and the terms and conditions of this permit.

B.10. Access to Communications or Alarm System OAC Rule 3745-54-34

The Permittee shall maintain access to the communications and alarm systems, as required by OAC Rule 3745-54-34, Section F of the Part B permit application, and the terms and conditions of this permit.

B.11. Required Aisle Space OAC Rule 3745-54-35

At a minimum, the Permittee shall maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency as required by OAC Rule 3745-54-35.

B.12. Arrangements with Local Authorities OAC Rule 3745-54-37

- (a) The Permittee shall comply with the requirements of OAC Rule 3745-54-37 (A) by making a diligent effort to:
 - (i) familiarize all emergency response agencies which are likely to respond in an emergency with the location and layout of the facility, properties of hazardous waste managed at the facility and associated hazards, places where facility personnel will normally be working, entrances to and roads inside the facility, and possible evacuation routes as depicted and explained in Section G of the approved Part B permit application;
 - (ii) inform such agencies of safety equipment, supplies, proper emergency safety procedures that are applicable to the facility, and any further requirements related to emergency response imposed by terms and conditions of this permit; and

- (iii) familiarize the local police and fire departments, hospitals and any other local emergency service, with the properties of hazardous waste managed at the facility and the types of injuries or illness which could result from fires, explosions, or releases at the facility.
- (b) When a State or local agency declines to enter into the arrangements set forth in OAC Rule 3745-54-37(A), the Permittee shall document the refusal in the operating record as required by OAC Rule 3745-54-37(B).

B.13. Implementation of Contingency Plan OAC Rules 3745-54-51 and 3745-54-56

The Permittee shall immediately carry out the provisions of the approved contingency plan and follow the emergency procedures described in OAC Rule 3745-54-56, whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which threatens or could threaten human health or the environment.

In regard to spills and related toxic gas releases, the plan must describe the criteria to be used by the emergency coordinator to determine when the plan will be implemented. At a minimum, the plan must be implemented in the following situations:

- (a) any spill or release of hazardous waste or hazardous waste constituents greater than or equal to 55 gallons;
- (b) any spill or release of hazardous waste or hazardous waste constituents less than 55 gallons that may result in a fire or explosion hazard, as determined by the Emergency Coordinator;
- (c) any spill or release of material that exhibits the characteristics of reactivity as defined by OAC Rule 3745-51-23 and which results in the release of gases that may threaten human health or the environment;
- (d) any spill on-site that may potentially cause on or off-site soil and/or ground or surface water contamination;
- (e) any spill or release of hazardous waste or hazardous waste constituents that is reported to the National Response Center or local (city or county) emergency response center because the spill exceeded the "RQ" limits.

B.14. Content of the Contingency Plan OAC Rule 3745-54-52

The Permittee shall comply with OAC Rule 3745-54-52 and the contingency plan, as set forth in Section G of the approved Part B permit application.

OHIO E.P.A.

OCT 30 98

ENTERED DIRECTOR'S JOURNAL

Hukill Chemical Corporation Part B Permit Conditions Page 17 of 50

B.15. Contingency Plan - Released Material and Emergency Response Material and By-products OAC Rule 3745-54-56(G)

All liquid or solid material resulting from fire, explosion, released material or emergency response material and by-products that the Permittee is required to evaluate to determine whether such material is hazardous waste in accordance with OAC Rule 3745-52-11, shall be collected and managed as a hazardous waste until such time as the Permittee can demonstrate that such waste is not hazardous in accordance with OAC Rules 3745-51-03(C) and (D).

B.16. Amendments to the Contingency Plan OAC Rule 3745-54-54

The Permittee shall review the approved contingency plan at least annually and upon the occurrence of any event listed in OAC Rule 3745-54-54. If necessary or appropriate, the Permittee shall amend the contingency plan as required by OAC Rule 3745-54-54 in accordance with OAC Rule 3745-50-51.

B.17. Copies of the Contingency Plan OAC Rule 3745-54-53

- (a) The Permittee shall comply with the requirements set forth in OAC Rule 3745-54-53 regarding contingency plan distribution.
- (b) The Permittee shall, in accordance with OAC Rule 3745-54-53, submit a copy of the approved contingency plan, to all local police departments, fire departments, hospitals, and local emergency response teams that may be called upon to provide emergency services. The Permittee shall notify such agencies and the local authorities, in writing, within ten (10) days of the effective date of any amendments of, or modifications to, the contingency plan.
- (c) The Permittee shall, in accordance with OAC Rule 3745-54-53, submit a copy of the approved contingency plan to the Ohio Environmental Protection Agency's Division of Emergency and Remedial Response.

B.18. Emergency Coordinator OAC Rule 3745-54-55

The Permittee shall comply with the requirements set forth in OAC Rule 3745-54-55 regarding the emergency coordinator.

OHIO E.P.A.

OCT 30 98

ENTERED DIRECTOR'S JOURNAL

Hukill Chemical Corporation Part B Permit Conditions Page 18 of 50

B.19. Emergency Procedures

OAC Rules 3745-54-56 and 3745-51-01

The Permittee shall comply with the requirements set forth in OAC Rule 3745-54-56, Section G of the approved Part B permit application, and the conditions of this permit, regarding emergency procedures.

B.20. Availability, Retention and Disposition of Records OAC Rule 3745-54-74

The Permittee shall furnish upon Ohio EPA request, and retain all records at the facility in accordance with OAC Rule 3745-54-74.

B.21. Operating Record

OAC Rule 3745-54-73

The Permittee shall comply with the requirements set forth in OAC Rule 3745-54-73 regarding an operating record, including information to be recorded and the maintenance thereof.

B.22. Contingency Plan Records

OAC Rules 3745-54-73 and 3745-54-56-(J)

The Permittee shall note in the operating record the time, date, and details of any incident that requires the implementation of the contingency plan. Within fifteen (15) days of any such incident the Permittee shall submit to the Director a written report of the incident containing the elements set forth in OAC Rule 3745-54-56(J).

B.23. Manifest System

OAC Rules 3745-54-70, 3745-54-71, 3745-54-72 and 3745-54-76

- (a) In the management of waste at the facility the Permittee shall comply with the provisions of OAC Chapter 3745-52 and OAC Rules, 3745-54-71, 3745-54-72 and 3745-54-76 with regard to the manifest system.
- (b) Manifest discrepancy report. If a significant discrepancy in a manifest is discovered, the Permittee must attempt to reconcile the discrepancy. If not resolved with fifteen (15) days after receiving the waste, the Permittee must submit a report, including a copy of the manifest, to the Director in accordance with OAC Rule 3745-54-72.
- (c) Unmanifested waste report. This report must be submitted to the Director within fifteen (15) days of receipt of unmanifested waste, which waste is not excluded from the manifest requirements by OAC Rule 3745-51-05, and include the information required under OAC Rule 3745-54-76.

0410 E.P.A.

OCT 30 98

Hukill Chemical Corporation Part B Permit Conditions Page 19 of 50

B.24. Annual Reports and Additional Reports OAC Rule 3745-54-77 and 3745-54-75

The Permittee shall comply with the annual report requirements set forth in OAC Rule 3745-54-75 and the additional report requirements set forth in OAC Rule 3745-54-77.

B.25. Closure Performance Standard OAC Rule 3745-55-11

During facility closure, the Permittee shall implement the provisions of the approved closure plan, Section I, in such a manner as to achieve compliance with OAC Rule 3745-55-11. Compliance with OAC Rule 3745-55-11 will be facilitated by referring to the Division of Hażardous Waste Management's most recent Closure Plan Review Guidance for RCRA facilities.

B.26. Closure Plan

OAC Rule 3745-55-10, OAC Rule 3745-55-11, and OAC Rule 3745-55-13

The Permittee shall implement those procedures detailed within Section I of the approved Part B permit application, in accordance with OAC Rules 3745-55-10 through 3745-55-20.

B.27. Amendment of Closure Plan OAC Rule 3745-55-12 and OAC Rule 3745-50-51

Should a change in the facility closure plan become necessary, the Permittee shall amend the approved closure plan in accordance with OAC Rule 3745-55-12 (C).

B.28. Content of Closure Plan OAC Rule 3745-55-12

The Permittee shall maintain the approved closure plan at the facility which contains the elements set forth in OAC Rule 3745-55-12 and all elements required by the terms and conditions of this permit.

B.29. Notification of Closure OAC Rule 3745-55-12

The Permittee shall notify the Director in writing at least 45 days prior to the date on which he expects to begin final closure of a facility, as required by OAC Rule 3745-55-12(D).

B.30. <u>Time Allowed For Closure</u> OAC Rule 3745-55-13

After receiving the final volume of hazardous waste, the Permittee shall remove from the facility or treat or dispose of on site all hazardous waste in accordance with the approved

OCT 30 98

Hukill Chemical Corporation Part B Permit Conditions Page 20 of 50

closure plan within ninety (90) days. The Director may approve a longer period, if the Permittee complies with all applicable requirements for requesting a modification to the permit as set forth in OAC Rule 3745-55-13(A).

The Permittee shall complete all closure activities within one hundred eighty (180) days in accordance with OAC Rule 3745-55-13. The Director may approve a longer closure period, if the Permittee complies with all applicable requirements for requesting a modification to the permit as set forth in OAC Rule 3745-55-13 (B).

B.31. <u>Disposal or Decontamination of Equipment, Structures, and Soils</u> OAC Rule 3745-55-14

- (a) The Permittee shall decontaminate and/or dispose of all contaminated facility equipment, structures, and soils, as required by OAC Rule 3745-55-14, the approved closure plan and the terms and conditions of this permit.
- (b) The Permittee shall notify Ohio EPA, Northeast District Office within five (5) working days prior to all rinseate and soil sampling.

B.32. <u>Certification of Closure</u> OAC Rule 3745-55-15

The Permittee and an independent, qualified, registered professional engineer shall certify that each hazardous waste management unit or the facility has been closed in accordance with the specifications in the approved closure plan and the terms and conditions of this permit, as required by OAC Rule 3745-55-15. The Permittee shall furnish to the Director, upon request, documentation supporting the certification.

B.33. <u>General Post-Closure Requirements</u> OAC Rules 3745-55-17, 3745-55-18, 3745-55-19, and 3745-55-20

(a) Post-Closure Care Period

If post-closure care is required, the Permittee shall begin post-closure care for the solvent tank farm and underground concrete cistern after completion of closure of the unit and continue for 30 years after that date. Post-closure care shall be in accordance with OAC Rule 3745-55-17 and the Post-Closure Plan.

(b) Amendment to Post-Closure Plan

The Permittee shall amend the Post-Closure Plan, when necessary, in accordance with OAC Rule 3745-55-18(D).

OHIO E.P.A.
OCT 30 98
ENTERED DIRECTOR'S JOURNAL

B.34. Cost Estimate for Facility Closure and Post-Closure OAC Rule 3745-55-42 and 3745-55-44

- (a) The Permittee's most recent closure and post-closure cost estimate, prepared in accordance with OAC Rules 3745-55-42, 3745-55-44, 3745-55-97(C)(3) & (5), 3745-56-28(C)(3) and 3745-56-58(C)(2) are specified in Section I of the Part B permit application.
- (b) The Permittee must adjust the closure and post-closure cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with OAC Rules 3745-55-43 and 3745-55-45 and Permit Condition B.35.
- (c) The Permittee must revise the closure cost estimate and post-closure cost estimate whenever there is a change in the facility's Closure Plan that increases the cost of closure and Post-Closure Plan, as required by OAC Rules 3745-55-42(C) and 3745-55-44(C).
- (d) The Permittee must submit to the Ohio EPA and keep at the facility the latest closure cost estimate and post-closure cost estimate as required by OAC Rules 3745-55-42(D) and 3745-55-44(D).

B.35. Financial Assurance for Facility Closure and Post-Closure

The Permittee shall maintain continuous compliance with OAC Rules 3745-55-43, 3745-55-45 and 3745-55-46 and provide documentation of financial assurance, which meets the requirements of OAC Rule 3745-55-51, in at least the amount of the cost estimates required by Permit Condition B.34.

B.36. Liability Requirements

The Permittee shall maintain continuous compliance with the requirement of OAC Rule 3745-55-47 and the documentation of liability by providing liability coverage which meets the requirements of OAC Rule 3745-55-51 for sudden accidental occurrences in the amount required by the applicable rules, exclusive of the legal defense costs.

B.37. Incapacity of Owners or Operators, Guarantors, or Financial Institutions OAC Rule 3745-55-48

The Permittee shall comply with requirements set forth in OAC Rule 3745-55-48 regarding the incapacity of owners, operators, guarantors or financial institutions.

B.38. <u>General Requirements for Land Disposal Restrictions</u> OAC Chapter 3745-59

The Permittee shall comply with all applicable regulations regarding land disposal prohibitions and restrictions as required by OAC Chapter 3745-59.

OCT 30

C. CONTAINER STORAGE AND MANAGEMENT

The Permittee operates two container storage areas. The east warehouse container storage area is located inside the east warehouse and measures 92 feet east to west by 74 feet north to south. The storage area is bounded at its perimeter by a 4.5 inch high integrated concrete curb. The doorways are ramped with reinforced concrete to a minimum height of 4.5 inches. The effective containment capacity is 18,360 gallons. The maximum container capacity in the east warehouse container storage area is 50,380 gallons of containerized waste.

The east pad container storage area is located outside to the east of the east warehouse and measures 13 feet east to west and 52 feet north to south. The east pad container storage area is used for storage of wastes which contain no free liquids and, therefore, is not required to have a containment system under OAC Rule 3745-55-75(C). The maximum storage capacity of the east pad container storage area is 19,800 gallons of containerized waste. The maximum combined storage capacity of the east warehouse and east pad container storage areas is 55,000 gallons of containerized waste.

C.1. Process Capacity/Annual Quantity Limitation OAC Rules 3745-50-43(A)(7)

- (a) The Permittee shall not store more than 55,000 gallons of containerized waste at any given time in the permitted container areas, located in the east warehouse and on the east pad. No more than 50,380 gallons of containerized waste shall be stored in the east warehouse storage area at any given time. No more than 19,800 gallons of containerized waste shall be stored on the east storage pad at any given time. The Permittee shall store hazardous waste in the types of containers (size and type) described in Section D of the approved Part B application.
- (b) For the purpose of compliance with the capacity limitation of this permit, each container will be considered to be storing an amount of hazardous waste equal to its capacity, regardless of the actual quantity stored in the container.
- (c) The provision of Conditions C.1(a) and C.2 shall not apply to the Permittee's activities as a generator accumulating hazardous waste on-site in compliance with the provisions of OAC Rule 3745-52-34(A). However, when accumulating waste within the permitted container storage area, in accordance with OAC Rule 3745-52-34(A), the Permittee shall not, for the total amount of hazardous waste stored and accumulated, exceed the maximum container storage inventory established under this Condition.

OHIO E.P.A.
OCT 30 98
ENTERED DIRECTOR'S JOURNAL

Hukill Chemical Corporation Part B Permit Conditions Page 23 of 50

C.2. Waste Identification.

ORC Sections 3734.02(F) and 3734.05(H); and OAC Rule 3745-50-43

The Permittee shall store in containers only the hazardous waste codes specified below:

U.S. EPA Hazardous Waste Numbers Permitted for Container Storage:

F001, F002, F003, F004, F005, F024, F025, F037, F038, F039, D001, D002, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, D043, K009, K010, K014, K015, K016, K017, K018, K019, K020, K021, K022, K023, K024, K025, K026, K028, K029, K030, K048, K049, K050, K051, K052, K060, K083, K085, K086, K087, K093, K094, K095, K096, K103, K104, K105, K136, K141, K142, U002, U004, U007, U008, U017, U019, U021, U024, U025, U027, U028, U029, U031, U032, U037, U039, U043, U044, U045, U046, U047, U048, U051, U052, U055, U056, U057, U066, U067, U068, U069, U070, U071, U072, U075, U076, U077, U079, U080, U081, U082, U083, U088, U089, U092, U101, U102, U107, U112, U113, U117, U118, U121, U122, U127, U131, U132, U134, U140, U144, U145, U146, U147, U153, U154, U159, U161, U162, U165, U166, U167, U168, U169, U171, U182, U183, U184, U188, U190, U191, U196, U201, U207, U208, U209, U210, U211, U213, U220, U221, U225, U226, U227, U228, U235, U238, U239, U353, U328, U359,

K062, D003, D012, D013, D014, D015, D016, D017, D020, D031, D032, F006, F019, U023, U123, K061

C.3. Condition of Containers OAC Rule 3475-55-71

If a container holding hazardous waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the Permittee shall transfer the hazardous waste from such container to a container that is in good condition or otherwise manage the waste in compliance with the conditions of this Permit or the hazardous waste facility chapters of the OAC.

C.4. Compatibility of Waste with Containers OAC Rule 3745-55-72

The Permittee shall use containers that are compatible with the hazardous waste to be stored.

C.5. <u>Management of Containers</u> OAC Rule 3745-55-73

(a) All container storage shall be conducted within the container storage containment system described in Condition C.1. of this permit and Section D of the approved Part B permit application.

OCT 30 98

- (b) The Permittee shall keep all containers closed during storage, except when it is necessary to add or remove waste, and shall not open, handle, or store containers in a manner which may rupture the container or cause it to leak.
- (c) In the event lab-pack waste are generated they shall be handled in compliance with applicable storage requirements.
- (d) In the event lab-pack waste are generated they shall be packaged in drums containing absorbent material that is compatible with the waste.

C.6. <u>Containment Systems</u> OAC Rule 3745-55-75 and ORC 3734.05(H)

- (a) The Permittee shall maintain the east warehouse containment system in accordance with the plans and specifications contained in Section D of the Part B permit application.
- (b) The Permittee shall maintain the east warehouse containment system as described in the approved Part B permit application, designed with sufficient capacity to contain ten percent of the total volume of the containers or the volume of the largest container, whichever is greater. Additionally, the containment system must be designed with sufficient capacity to contain 100% of the total volume of the 1000 gallon disperser tank as well as the required container volume. The containment system shall be free of cracks and gaps and sufficiently impervious to contain leaks and spills and accumulated precipitation until the collected material is detected and removed. The Permittee shall insure that the coatings utilized in lining the secondary containment system are compatible with each waste stored in containers situated at the permitted Container Storage Areas. For those hazardous wastes that are deemed incompatible with the liner materials the Permittee shall install separate secondary containment structures, located within the existing structures, possessing the appropriate liners in order to withstand any degrading effects imposed through initial and/or prolonged contact (e.g., 24 hours) with released waste materials.
- (c) The Permittee shall annually non-destructively test at least 20% of the steel plate floor's welded seams for failure. Should a failure be detected, the facility shall implement the following:
 - (i) determine the full extent of failure;
 - (ii) fully document the repair of the damaged seam; and
 - (iii) test the remainder of the seams for failure and ensure that 100% of the seams that can be tested, have been tested and all failures repaired. Due to the nature of the construction of the steel plate floor, it is impossible to test all of the seams.

OCT 30 98

Hukill Chemical Corporation Part B Permit Conditions Page 25 of 50

Yearly testing shall be done such that at the end of a five year time period, 100% of the seams that can be tested shall have been tested. All obvious areas of degradation shall be tested in addition to the area scheduled for annual testing.

- (d) Spilled or leaked waste and accumulated precipitation shall be removed from the sump or collection areas in a timely manner. This time period is not to exceed twenty-four (24) hours from the time spilled and/or leaked waste is discovered to have reached the hazardous waste pad sumps.
- (e) The provisions of Condition C.6(a) through (d) do not apply to the east pad container storage area. No wastes shall be stored on the east pad container storage area unless they are found to contain no free liquids according to the Paint Filter Liquids Test, SW-846 Method 9095.

C.7. <u>Inspection Schedules and Procedures</u> OAC Rules 3745-54-15 and 3745-54-73

As required by OAC Rule 3745-54-15, the Permittee shall inspect the container storage area in accordance with the approved inspection schedule contained in Section F of the Part B permit application, to detect leaking containers and deterioration of containers and the containment system caused by corrosion or other factors. The Permittee shall note the results of these inspections in the inspection log along with any remedial action taken. On days when containerized waste are added or removed to and/or from any of the permitted areas for storage, the Permittee shall conduct an inspection as described in Section F of the approved Part B permit application, and maintain the inspection results in the facility operating record.

C.8. Recordkeeping OAC Rule 3745-54-73

The Permittee shall comply with all recordkeeping requirements of OAC Rule 3745-54-73 as part of the facility operating record and any other documentation showing compliance with the requirements of Permit Condition C.10., OAC Rules 3745-54-17(B) and 3745-55-77.

C.9. Special Container Provisions for Ignitable or Reactive Waste OAC Rules 3745-54-17 and 3745-55-76

- (a) The Permittee shall not locate containers holding ignitable or reactive waste within 15 meters (50 feet) of the facility's property line.
- (b) The Permittee shall take precautions to prevent accidental ignition or reaction of ignitable or reactive waste and shall follow the storage procedures specified in Sections D and F of the Part B permit application.

OHIO E.P.A.

OCT 30 98

Hukill Chemical Corporation Part B Permit Conditions Page 26 of 50

C.10. Special Container Provisions for Incompatible Waste OAC Rule 3745-55-77 and 3745-54-17

- (a) The Permittee shall not store incompatible waste except in accordance with OAC Rules 3745-54-17(B) and 3745-55-77.
- (b) The Permittee shall not place hazardous waste in an unwashed container that previously held an incompatible waste or material.
- (c) The Permittee shall separate containers of incompatible wastes from each other and other incompatible wastes and materials.

C.11. <u>Closure and Post-Closure</u> OAC Rules 3745-55-10, 3745-55-11 and 3745-55-78

- (a) At closure of the container area, the Permittee shall remove all hazardous waste and hazardous waste residues from the containment system, in accordance with the procedures in the Closure Plan set forth in Section I of the approved Part B permit application.
- (b) If the Permittee demonstrates that not all contaminated soils can be practically removed or decontaminated in accordance with the Closure Plan, Section I of the approved Part B permit application, the Permittee shall close the unit and perform post-closure care following a plan approved by the Director.

OHIO E.P.A.

OCT 30 98

ENTERED DIRECTOR'S JOURNAL

D. TANK STORAGE AND MANAGEMENT

The Permittee stores hazardous waste at six on-site tank storage areas prior to on-site reclamation, on-site recycling, on-site neutralization, and/or transfer of these wastes to an off-site permitted treatment, storage, and disposal facility.

The following is a description of the nineteen storage tanks and the name of the tank dike where each tank is located. See Permit Condition D.1 for a table of all the tanks discussed below.

The tank storage area designated herein as the hazardous waste tank dike consists of seven tanks. Six tanks each have storage capacities of 14,000 gallons and one tank has a storage capacity of 21,000 gallons. The hazardous waste tank dike is constructed to contain 100% of the capacity of the largest tank within its boundary as required by Ohio law

The tank storage area designated herein as the feeds/process tank storage area consists of four tanks, each with a storage capacity of 2,900 gallons. The feeds/process tanks' secondary containment structure is constructed to contain 100% of the capacity of largest tank within its boundary as required by Ohio law.

The disperser tank is a 1000 gallon dispersion/mixer tank located in the east warehouse container storage area. The east warehouse secondary containment system is constructed to contain 100% of the capacity of this tank as well as ten percent of the total volume of all containers, or the volume of the largest container, whichever is greater. (Permit condition C.8.(b))

The tank storage area designated herein as the feed and bottoms tank storage dike consists of three tanks. Two tanks each have storage capacities of 6,000 gallons and one tank has a storage capacity of 16,000 gallons. The feed and bottoms dike is constructed to contain 100% of the capacity of the largest tank within its boundary as required by Ohio law.

The tank storage area designated herein as the hazardous waste fuels dike F-1 consists of three tanks. One tank has a storage capacity of 9,500 gallons, one tank has a storage capacity of 10,000 gallons, and one tank has a storage capacity of 6,000 gallons. The hazardous waste fuels dike F-1 is constructed to contain 100% of the capacity of the largest tank within its boundary as required by Ohio law.

The tank storage area designated herein as the spent acid tank dike consists of one tank with a storage capacity of 12,000 gallons. (See Permit condition D.11).

Until January 1989, the Permittee had seven hazardous waste storage tanks located in a tank farm whose secondary containment system consisted of an earthen dike. In January 1989, the tanks in this tank farm were moved to the hazardous waste tank storage dike in order to comply with Ohio law regarding secondary containment requirements. Sampling

OCT 30 98

in the area where the hazardous waste storage tanks were located revealed soil and groundwater contamination attributable to past use of this waste management unit. From 1975 until 1982, the Permittee also used an underground concrete cistern for secondary containment for floor drains and trenches located in the facility. In 1982, the floor drains were sealed. Subsequent sampling of the soil and groundwater around the cistern revealed contamination attributable to past use of this unit as a secondary containment structure. The Permittee has proposed closure of the two above described hazardous waste management units as a landfill pursuant to OAC Rule 3745-66-97(B). (See Condition A.26.(b) for details).

D.1. Process Capacity/Annual Limitation/Waste Identification ORC Section 3734.02(F) and OAC Rule 3745-50-43

The Permittee may store a total volume of 183,100 gallons of hazardous waste in (a) nineteen tanks, subject to the terms of this Permit and as follows:

Tank No.	Capacity (Gallons)	Dimensions of Tank	Secondary Containment Required	Description of Hazardous Waste
HW Tank Storage Dike:				
Tank V-114	14,000	10.5 ft(diam) x 24 ft	Yes- in place	Waste organic solvents Condition D.1(c)(i)
Tank V-214	14,000	10.5 ft(diam) x 24 ft	Yes- in place	Waste organic solvents Condition D.1(c)(i)
Tank V-314	14,000	10.5 ft(diam) x 24 ft	Yes- in place	Waste organic solvents Condition D.1(c)(i)
Tank V-414	14,000	10.5 ft(diam) x 24 ft	Yes- in place	Waste organic solvents Condition D.1(c)(i)
Tank V-514	14,000	10.5 ft(diam) x 24 ft	Yes- in place	Waste organic solvents Condition D.1(c)(i)
Tank V-614	14,000	10.5 ft(diam) x 24 ft	yes- in place	Waste organic solvents Condition D.1(c)(i)
Tank V-120	21,000	12 ft(diam) x 25 ft	Yes- in place	Waste organic solvents Condition D.1(c)(i) OH!O E.P.A
				000

OCT 30 98

Hukill Chemical Corporation Part B Permit Conditions Page 29 of 50

Tank No.	Capacity (Gallons)	Dimensions of Tank	Secondary Containment Required	Description of Hazardous Waste
Feed/ Process Tanks				
8-3-F	2,900	7 ft(diam) x 10 ft	Yes- in place	Waste organic solvents Condition D.1(c)(i)
9-3-F	2,900	7 ft(diam) x 10 ft	Yes- in place	Waste organic solvents Condition D.1(c)(i)
10-3-F	2,900	7 ft(diam) x 10 ft	Yes- in place	Waste organic solvents Condition D.1(c)(i)
11-3-F	2,900	7 ft(diam) x 10 ft	Yes- in place	Waste organic solvents Condition D.1(c)(i)
Dispersion Tank:				
Disp- erser	1,000	6 ft(diam) x 6 ft	Yes- in place	Waste organic solvents Condition D.1(c)(i)
Feed & Botto Tank Storage				
Tank V-6000E	6,000	8 ft(diam) x 20 ft	Yes- in place	Waste organic solvents Condition D.1(c)(i)
Tank V-6000W	6,000	8 ft(diam) x 20 ft	Yes- in place	Waste organic solvents Condition D.1(c)(i)
Tank V-117	16,000	10.5 ft(diam) x 27 ft	Yes- in place	Waste organic solvents Condition D.1(c)(i)
HW Fuels Dike F-1:				
Tank V-110M	9,500	9.5 ft(diam) x 24 ft	Yes- in place	Waste organic solvents Condition D.1(c)(i)

OHIO E.P.A. OCT 30 98

Tank No.	Capacity (Gallons)	Dimensions of Tank	Secondary Containment Required	Description of Hazardous Waste
Tank V-210M	10,000	10 ft(diam) x 15 ft	Yes- in place	Waste organic solvents Condition D.1(c)(i)
Tank V-6000C	6,000	10.5 ft(diam) x 13.5 ft	Yes- in place	Waste organic solvents Condition D.1(c)(i)
Spent Acid Tank Dike:				
Spent Acid Tank	12,000	11 ft(diam) x 20 ft	Yes-	Corrosive wastes Condition D.1(c)(ii)

^{*} see permit Condition D.11.

During any calendar year, the Permittee shall not manage through tank storage (b) hazardous waste in excess of the maximum annual quantity set forth in Condition B.1(b) of this permit.

- The Permittee shall store in tanks only the hazardous waste codes specified in the (c) approved Part B permit application and summarized below:
 - Waste Organic Solvent Tanks: (i)

D001, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, D043, F001, F002, F003, F004, F005, F024, F025, F037, F038, F039, K009, K010, K014, K015, K016, K017, K018, K019, K020, K021, K022, K023, K024, K025, K026, K028, K029, K030, K048, K049, K050, K051, K052, K060, K083, K085, K086, K087, K093, K094, K095, K096, K103, K104, K105, K136, K141, K142, U002, U004, U007, U008, U017, U019, U021, U024, U025, U027, U028, U029, U031, U032, U037, U039, U043, U044, U045, U046, U047, U048, U051, U052, U055, U056, U057, U066, U067, U068, U069, U070, U071, U072, U075, U076, U077, U079, U080, U081, U082, U083, U088, U089, U092, U101, U102, U107, U112, U113, U117, U118, U121, U122, U127, U131, U132, U134, U140, U144, U145, U146, U147, U153, U154, U159, U161, U162, U165, U166, U167, U168, U169, U171, U182, U183, U184, U188, U190, U191, U196, U201, U207, U208, U209, U210, U211, U213, U220, U221, U225, U226, U227, U228, U235, U238, U239, U353, U328, U359, D002.

D003, D012, D013, D014, D015, D016, D017, D020, D031, D032, F006, F019, K061, U023, U123.

(ii) Waste Acid Tank

D002, D004, D005, D006, D007, D008, D009, D010, D011, D012, D013, D014, D015, D016, D017, D018, D019, D020, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D031, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, D043, K086, K087, F001, F002, F003, F004, F005.

- (d) The Permittee is prohibited from storing hazardous waste that is not identified in this permit condition.
- (e) The Permittee is prohibited from storing hazardous waste with the waste codes K025 and K026 in any of the tanks used for fuels blending.
- (f) The Permittee is prohibited from storing D002 characteristically hazardous waste in the waste organic solvent tanks unless the waste code D002 is a secondary characteristic of a corrosive solvent waste stream.

D.2. RESERVED

D.3. Containment and Detection of Releases OAC Rule 3745-55-93

(a) New Tank Systems. The Permittee shall operate the secondary containment system in accordance with requirements of OAC Rules 3745-55-93(B) through (F), and Section D of the approved Part B application.

New tanks at the facility are tanks V-114, V-214, V-314, V-414, V-514, V-614, and V-120 located in the existing hazardous waste tank storage dike; tanks 8-3-F, 9-3-F, 10-3-F, and 11-3-F located in the feeds/process tank storage area; and the disperser tank, located in the east warehouse container storage area.

(b) Existing Tank Systems with Secondary Containment. The Permittee shall design, construct, and operate the secondary containment system, in accordance with the detailed design plans and descriptions contained in the Part B permit application. [OAC Rules 3745-55-93(B) through (F)]

Existing tanks at the facility are tanks V-6000E, V-6000W, and V-117 located in the existing feed and bottoms tank storage dike; tanks V-110M, V-210M, and V-6000C located in the hazardous waste fuels dike F-1.

(c) Existing Tank Systems without Secondary Containment. The existing tank at the facility that does not meet the current secondary containment standards is the spent acid tank. See Permit Condition D.11.

OHIO E.P.A.

OCT 30 98

ENTERED DIRECTOR'S JOURNAL

D.4. Operating Requirements OAC Rule 3745-55-94

- (a) The Permittee shall not place hazardous wastes or treatment reagents in the tank system if they could cause the tank, its ancillary equipment, or a containment system to rupture, leak, corrode, or otherwise fail.
- (b) The Permittee shall prevent spills and overflows from the tank or containment systems using the methods described in the Part B permit application. The Permittee shall comply with the requirements of OAC Rule 3745-55-96 if a leak or spill occurs in the tank system.

D.5. <u>Inspection Schedules and Procedures</u> OAC Rule 3745-55-95

- (a) The Permittee shall inspect the tank systems, in accordance with the Inspection Schedule and shall complete the items in Permit Conditions D.5(b) and D.5(c) as part of those inspections:
- (b) The Permittee shall inspect the overfill controls, in accordance with the procedure and schedule in the Part B permit application.
- (c) The Permittee shall inspect the following components of the tank system once each operating day:
 - (i) Aboveground portions of the tank system to detect corrosion or releases of waste:
 - (ii) Data gathered from monitoring and leak detection equipment (e.g., pressure or temperature gauges, monitoring wells) to ensure that the tank system is being operated according to its design;
 - (iii) Construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system, to detect erosion or signs of releases of hazardous waste (e.g., wet spots, dead vegetation).
- (d) The Permittee shall semi-annually inspect the tank wall thickness of the Feed/Process Tanks: 8-3-F, 9-3-F, 10-3-F, and 11-3-F, using an ultrasound testing method and provide the inspection report to Ohio EPA.

At a minimum this inspection report shall include the following items:

- (i) Test Standard (e.g., ASME SA-435/SA-435M, ASTM A 435 /A 435M-82);
- (ii) Test Apparatus;

OHIO E.P.A.

OCT 30 98

- (iii) Test Conditions;
- (iv) Test Procedure;
- (v) Drawings showing locations of the test points on the grid;
- (vi) Field Report showing materials of construction, joints details, construction details and thickness readings; and
- (vii) Test Results showing calculations.

When available, Manufacturer's Data Report for the tank must be included.

If a point on any tank exhibits a thickness of 20% less than the UL-142 required minimum thickness of 0.167 inch, then the tank shall be immediately taken out of service.

(e) The Permittee shall document compliance of Permit Condition D.5 in the operating record of the facility.

D.6. Response to Leaks or Spills OAC Rule 3745-55-96

- (a) In the event of a leak or a spill from the tank system, from a secondary containment system, or if a system becomes unfit for continued use, the Permittee shall remove the system from service immediately and complete the following actions:
 - Stop the flow of hazardous waste into the tank system or secondary containment system and inspect the system to determine the cause of the release;
 - (ii) Remove waste and accumulated precipitation from the system within 24 hours of the detection of the leak or at an earlier practicable time to prevent further release and to allow inspection and repair of the tank/containment system to be performed; and
 - (iii) Contain visible releases to the environment. The Permittee shall immediately conduct a visual inspection of all releases to the environment and based on that inspection: (1) prevent further migration of the leak or spill to soils or surface water and (2) remove and properly dispose of any visible contamination of the soil or surface water.
- (b) Unless the requirements of Permit Conditions D.6.(b)(i) through D.6.(d)(iii) are satisfied, the Permittee shall close its tank system in accordance with OAC Rule 3745-55-97 and its approved Closure Plan if there has been a leak or spill from

OHIO E.P.A.

OCT 30 98

CHTERED DIRECTOR'S JOURNAL

the tank system, from a secondary containment system, or if a system becomes unfit for continual use.

- (i) For a release caused by a spill that has not damaged the integrity of the system, the Permittee shall remove the released waste and make any necessary repairs to fully restore the integrity of the system before returning the tank system to service.
- (ii) For a release caused by a leak from the primary tank system to the secondary containment system, the Permittee shall repair the primary system prior to returning it to service.
- (iii) If the Permittee replaces a component of the tank system to eliminate the leak, that component must satisfy the requirements for new tank systems or components in OAC Rules 3745-55-92 and 3745-55-93.
- (c) For all major repairs to eliminate leaks or restore the integrity of the tank system, the Permittee must obtain a certification by an independent, qualified, registered professional engineer in accordance with OAC Rule 3745-50-42(D) that the repaired system is capable of handling hazardous wastes without release for the intended life of the system before returning the system to service. Examples of major repairs are:

installation of an internal liner, repair of a ruptured tank, or repair or replacement of a secondary containment vault.

D.7. Recordkeeping and Reporting OAC Rules 3745-55-96, 3745-55-91(A), and 3745-55-92(G)

- (a) The Permittee shall report to the Director, within 24 hours of detection, when a leak or spill occurs from the tank system or secondary containment system to the environment. (A leak or spill of one pound or less of hazardous waste, that is immediately contained and cleaned-up, need not be reported. Releases that are contained within a secondary containment system need not be reported.
- (b) Within 30 days of detecting a release to the environment from the tank system or secondary containment system, the Permittee shall report the following information to the Director:
 - (i) Likely route of migration of the release;
 - (ii) Characteristics of the surrounding soil (including soil composition, geology, hydrogeology, and climate);
 - (iii) Results of any monitoring or sampling conducted in connection with the release. If the Permittee finds it will be impossible to meet this time

period, the Permittee should provide the Director with a schedule of when the results will be available. This schedule must be provided before the required 30-day submittal period expires;

- (iv) Proximity of downgradient drinking water, surface water, and populated areas; and
- (v) Description of response actions taken or planned.
- (c) The Permittee shall submit to the Director all certifications of major repairs to correct leaks within seven days from returning the tank system to use.
- (d) The Permittee shall obtain, and keep on file at the facility, the written statements by those persons required to certify the design and installation of the tank system.
- (e) The Permittee shall keep on file at the facility the written assessment of the tank system's integrity.
- (f) The Permittee shall maintain at the facility a record of the results of leak tests and integrity tests conducted, in accordance with Permit Conditions D.5(c)(i) through D.5(c)(ii).

D.8. Closure and Post-Closure Care OAC Rule 3745-55-97

- (a) At closure of the tank system(s), the Permittee shall follow the procedures in the Closure Plan.
- (b) If the Permittee demonstrates that not all contaminated soils can be practically removed or decontaminated, in accordance with the Closure Plan, then the Permittee shall close the tank system(s) and perform post-closure care following the contingent procedures in the Closure Plan and in the Post-Closure Plan.

D.9. <u>Special Tank Provisions for Ignitable or Reactive Wastes</u> OAC Rule 3745-55-98

- (a) The Permittee shall not place ignitable or reactive waste in the tank system or in the secondary containment system, unless the procedures specified in the Part B permit application are followed. The Permittee shall document compliance with this condition and place it in the operating record.
- The Permittee shall comply with the requirements for the maintenance of protective distances between the waste management area and any public ways, streets, alleys, or an adjoining property line that can be built upon, as required in Tables 2-1 through 2-6 of the National Fire Protection Association's "Flammable and Combustible Liquids Code" (1991 or most recent edition)) incorporated by reference in OAC Rule 3745-50-11.

OCT 30 98

Hukill Chemical Corporation Part B Permit Conditions Page 36 of 50

D.10. Special Tank Provisions for Incompatible Wastes OAC Rule 3745-55-99

- (a) The Permittee shall not place incompatible wastes, or incompatible wastes and materials, in the same tank system or the same secondary containment system, unless the procedures specified in the Part B permit application are followed. The Permittee shall document compliance with this condition and place that documentation into the operating record.
- (b) The Permittee shall not place hazardous waste in a tank system that has not been decontaminated and that previously held an incompatible waste or material, unless the requirements of Permit Condition D.10(a) are met.

D.11. <u>Demonstration to Delay Closure</u> OAC Rule 3745-55-13

Within thirty (30) days of the journalization of this permit, the Permittee shall submit to the Director a demonstration that:

- (a) The out of service spent acid tank is fit to receive additional hazardous waste;
- (b) There is reasonable likelihood that the Permittee will recommence operation of the spent acid tank within one (1) year; and
- (c) The Permittee has taken and will continue to take all steps to prevent threats to human health and the environment from the unclosed but inactive spent acid tank, including compliance with all applicable permit requirements.

Upon written acceptance of this demonstration, the spent acid tank may remain unclosed for a period of one (1) year following the date of acceptance. The facility must make an acceptable demonstration annually thereafter, due by the anniversary date of the accepted demonstration required above, for the tank to remain unclosed.

Should the Director not accept the demonstration required by this condition, the Permittee shall begin closure of the inactive tank within forty five (45) days of notice by the Director and in accordance with the approved closure plan.

Should the Permittee recommence operation of the spent acid tank, Ohio EPA, Northeast District Office shall be notified thirty (30) days in advance of the first receipt of waste. The Permittee shall submit to Ohio EPA, Northeast District Office an inspection report of the wall thickness of the tank using an ultrasound method as described in Condition D.5.(d) of this permit (60) days prior to placing the tank back in service.

OHIO E.P.A.

OCT 30 98

ENTERED DIRECTOR'S JOURNAL

E. POST-CLOSURE REQUIREMENTS FOR UNITS CLOSING OR CLOSED PURSUANT TO THE INTERIM STANDARDS

E.1 <u>Closure and Post-Closure Care</u> (Interim Standard Units)

Until January 1989, the Permittee had seven hazardous waste storage tanks located in a tank farm whose secondary containment system consisted of an earthen dike. In January 1989, the tanks in this tank farm were moved to the hazardous waste tank storage dike in order to comply with Ohio law regarding secondary containment requirements. Previous sampling in the old solvent tank farm area revealed soil and groundwater contamination attributable to past use of this waste management unit.

From 1975 until 1982, the Permittee also used an underground concrete cistern for secondary containment for floor drains and trenches located in the facility. In 1982, the floor drains were sealed. Subsequent sampling of the soils and groundwater around the cistern revealed contamination attributable to past use of this unit as a secondary containment structure.

The Permittee has proposed closure of the two above described hazardous waste management units as a landfill pursuant to OAC Rule 3745-66-97(B), closure as a landfill when a tank system cannot be clean closed. The Permittee submitted a proposal for an alternate method of closure to Ohio EPA which was received on July 6, 1998.

Closure of the units will also fulfill the requirements of the 1985 Consent Agreement and Final Order (CAFO) the Permittee entered into with U.S. EPA. The CAFO required the Permittee to conduct an investigation to determine the nature and extent of potential contamination from storage operations at the tank farm and underground cistern, and to select and implement corrective action. U.S. EPA reviewed five alternatives submitted by the Permittee and approved Corrective Action Alternative 5. The closure plan, dated February 17, 1994, incorporates the requirements of Corrective Action Alternative 5. The Permittee submitted an alternate proposal for closure, dated June 30, 1998. The Ohio EPA and the Permittee will meet after permit journalization to discuss the alternate proposal as well as the current closure plan.

E.2. Unit Identification

In accordance with permit Condition A.26, the Permittee shall provide post-closure care for the solvent tank farm and underground concrete cistem subject to the terms and conditions of this permit.

E.3. Closure and Post-Closure Procedures

In accordance with permit Condition A.26 the Permittee shall conduct post-closure care of the hazardous waste management units described in permit conditions E.1 and E.2, upon approval and or/modification of the closure/post closure plan submitted by Permittee, incorporated herein by reference and subject to the conditions of this permit.

OCT 30 98

- In accordance with permit Condition A.26, the Permittee shall maintain and (b) monitor the groundwater monitoring system as required by permit condition F.1 of this permit.
- (c) In accordance with permit Condition A.26, the Permittee shall maintain the integrity and effectiveness of the final cover, including making repairs to the cap as necessary to correct the effects of settling, subsidence, erosion, or other events. In the event that the Permittee can implement another remediation strategy which does not require construction and maintenance of a landfill cap. this requirement will no longer be required.
- (d) In accordance with permit Condition A.26, the Permittee shall prevent run-on and run-off from eroding or otherwise damaging the final cover. In the event that the Permittee can implement another remediation strategy which does not require construction and maintenance of a landfill cap, this requirement will no longer be required.

E.4. General Post-Closure Requirements OAC Rule 3745-55-17

(a)

Wance with permit Condition A.27, the Permittee shall conduct postconductors E.1 and E.2, to begin after completion of closure of the units and continue for 30 years after that date, except that the 30-year post-closure period may be shortened upon application and demonstration approved by Ohio EPA that the facility is secure, or may be extended by Ohio EPA if the Director finds his is necessary to protect human health and the environment.

Ost-Closure Security

accordance with permit Condition A.27, the Permittee shall conduct postconductor po

(b)

E.5. **Inspections**

In accordance with permit Condition A.27, the Permittee shall inspect the components, structures, and equipment at the site in accordance with the inspection schedule.

E.6. **Notices and Certification**

No later than 60 days after certification of closure of each permitted hazardous (a) waste disposal unit, the Permittee shall submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the Director a record of the

type, location, and quantity of hazardous wastes disposed of within each cell or other disposal unit of the facility. For hazardous wastes disposed of before January 12, 1981, the Permittee shall identify the type, location, and quantity of the hazardous wastes to the best of his knowledge and in accordance with any records he has kept.

- (b) Within 60 days of certification of the first and the last hazardous waste disposal unit, the Permittee shall:
 - (i) record, in accordance with Ohio law, a notation on the deed to the facility property or on some other instrument that is normally examined during the title search that will in perpetuity notify any potential purchasers of the property that:
 - (1) the land has been used to manage hazardous waste;
 - (2) its use is restricted under OAC Rules 3745-55-10 through 3745-55-20; and
 - (3) the survey plat and record of the type, location, and quantity of hazardous wastes disposed of within each cell or other hazardous waste disposal unit of the facility have been filed with the Director and the local zoning authority or the authority with jurisdiction over local land use.
 - (ii) submit a certification to the Director, signed by the Permittee, that he has recorded the notation specified in permit Condition E.6(b)(i), including a copy of the document in which the notation has been placed.
- (c) If the Permittee or any subsequent owner or operator of the land upon which the hazardous waste disposal unit is located, wishes to remove hazardous wastes and hazardous waste residues, the liner, if any; or contaminated soils, then he shall request a modification to this post-closure permit in accordance with the applicable requirements in OAC Chapter 3745-50.

The Permittee or any subsequent owner or operator of the land shall demonstrate that the removal of hazardous wastes will satisfy the criteria of OAC Rule 3745-55-17(C).

(d) No later than 60 days after completion of the established post-closure care period for each hazardous waste disposal unit, the Permittee shall submit to the Director, by registered mail, a certification that the post-closure care for the hazardous waste disposal unit was performed in accordance with the specifications in the approved post-closure plan. The certification must be signed by the Permittee and an independent, qualified, registered professional engineer.

OCT 30 98

Hukill Chemical Corporation Part B Permit Conditions Page 40 of 50

Documentation supporting the independent, qualified, registered professional engineer's certification must be furnished to the Director upon request until the Director releases the Permittee from the financial assurance requirements for post-closure care under OAC Rule 3745-55-45.

E.7. Financial Assurance

The Permittee shall maintain financial assurance during the post-closure period and comply with all applicable requirements of OAC Rules 3745-55-40 through 3745-55-51.

E.8. Post-Closure Permit Modifications

The Permittee must request a permit modification to authorize a change in the approved post-closure plan. This request must be in accordance with applicable requirements of OAC Chapter 3745-50, and must include a copy of the proposed amended post-closure plan for approval by the Director.

The Permittee shall request a permit modification whenever changes in operating plans or facility design affect the approved post-closure plan, there is a change in the expected year of final closure, or other events occur during the active life of the facility that affect the approved post-closure plan.

The Permittee must submit a written request for a permit modification at least 60 days prior to the proposed change in facility design or operation, or no later than 60 days after an unexpected event has occurred which has affected the post-closure plan.

OHIO E.P.A.

OCT 30 98

F. GROUNDWATER MONITORING REQUIREMENTS FOR UNITS CLOSING PURSUANT TO THE INTERIM STANDARDS

F.1. Groundwater Monitoring Requirements

- (a) In accordance with permit Condition A.26, the Permittee shall provide groundwater monitoring for the solvent tank farm and the underground concrete cistern subject to the terms and conditions of this permit.
- (b) The Permittee shall maintain and monitor the groundwater monitoring system as described in the approved closure plan and approved post-closure plan and shall comply with all applicable requirements of OAC Rules 3745-65-90 through 3745-65-94 until such time as the groundwater monitoring plan required by permit Condition F.1(c) is approved by Ohio EPA.
- (c) The Permittee shall submit to Ohio EPA within 270 days after permit journalization, in accordance with the Ohio hazardous waste rules, a description of a groundwater monitoring system that is designed to meet the requirements of OAC Rules 3745-50-44(B), 3745-54-90 through 3745-54-99, and 3745-55-01 through 3745-55-02.

Upon approval of Ohio EPA, the proposed groundwater monitoring plan shall be incorporated into the permit. Submission of this plan shall not be dependent upon the development of a groundwater monitoring program to monitor the natural attenuation process.

OHIO E.P.A.

OCT 30 98

G. CORRECTIVE ACTION REQUIREMENTS

Corrective Action Summary

In 1985, Hukill Chemical Corporation entered into a Consent Agreement and Final Order (CAFO) with U.S. EPA to conduct an investigation:

- To determine the nature and extent of potential contamination from storage operations at the facility's solvent tank storage farm;
- To determine the need for corrective action to eliminate potential threats to the environment; and
- To select and implement corrective action including the closure of an underground cistern at the facility.

A report entitled "Site Investigation Report (October 1988, revised in January 1989)" was prepared by Eder Associates Consulting Engineers, P.C. (Eder), on behalf of the Permittee. The document summarizes the investigation of contamination at the site, and was prepared in a manner similar to an RFI report. The report also identifies Waste Management Units (WMUs) at the facility. A listing of these units can be found in Permit Condition G.3.

Hukill Chemical Corporation proposed 5 alternative corrective action plans designed to address releases at the site. The alternative corrective action plan reports were prepared in a manner similar to a corrective measures study. U. S. EPA approved the Corrective Action Alternative 5 on February 8, 1990, which consists of the following elements, summarized in the June 1990 report, "Corrective Action Study Report":

- Placing a single layer asphalt or concrete cap over the unpaved area around the No-Free Liquid Container Storage Area;
- Filling sumps in the solvent tank farm with concrete;
- Closing the tank farm pursuant to 40 CFR 265.111, and 265.197, OAC Rules 3745-66-11 and 3745-66-97, including a concrete cap over the base of the tank farm with a bearing capacity sufficient to support storage tanks;
- Closing the cistern pursuant to 40 CFR 265.111, and 265.197, OAC Rules 3745-66-11, and 3745-66-97, by backfilling the tank with clean soil, sealing the access manways with concrete and repairing cracks in the concrete pavement in the cistern area:
- Continuing operation of the French drain system located east of the solvent tank farm, removing and disposing of contaminated perched groundwater;
- Installing a perched water collection system near the cistern; and

Hukill Chemical Corporation Part B Permit Conditions Page 43 of 50

> Implementing plume management pursuant to a RCRA Alternative Concentration Limit (ACL) and consistent with 40 CFR 264.94, and OAC Rule 3745-54-94. The actual ACL will be determined through a Post-Closure permit application pursuant to 40 CFR 265.197(b) and 270.1(c).

In addition to these corrective actions, this plan includes a contingent corrective action pump and treat system for groundwater down gradient of the tank farm.

The following actions have been taken by the Permittee to address remediation of the WMUs:

- A closure plan has been submitted to Ohio EPA for the solvent tank farm and underground cistern area;
- An alternate closure plan with different remedial strategies has been submitted to Ohio EPA for the solvent tank farm and underground cistern area;
- The no free liquid container storage area has been covered with concrete;
- An underground 10,000 gallon API separator tank was located to the east of the solvent tank farm. The depth at the center of the basin was approximately 4 feet. In August 1988, the API tank was removed from service and the tank excavation was backfilled. The tank had been used as the collector for a French drain system installed to collect subsurface seepage that could migrate in an easterly direction from the tank farm. The french drain is located to the east of the tank farm. Storm water is now collected in a 15,000 gallon underground tank and pumped to holding tanks prior to air stripping and final discharge to the sewer;
- The storm water sewer collection system has been replaced. The tributary to Tinkers Creek used to be the location of outfall 001. The Permittee received authorization June 6, 1990, from the Army Corp of Engineers to enclose the channel, which has been done. Storm water no longer discharges to outfall 001; and,
- The Permittee states that they have demonstrated that the chem pack fill area, the northwest fill area, the neutralization pits and the API tank basin do not require any remediation.

The Permittee is claiming no further action for the units based upon a letter written by Eder, dated November 22, 1989, which summarized a November 7, 1989 meeting between U.S. EPA, Ohio EPA, HCC and Eder. The November 22, 1989 letter stated that it was Eder's understanding from the November 7 meeting, that the chem pack area, the northwest fill area, the neutralization pits, and the API tank basin, did not require further action. U.S. EPA's letter, dated December 8, 1989 did not agree nor disagree with Eder's summary letter regarding the aforementioned units.

OCT 30 98

Hukill Chemical Corporation Part B Permit Conditions Page 44 of 50

Subsequent to the issue of this permit Ohio EPA shall require Hukill Chemical Corporation to continue corrective action activities to facilitate the closure/remediation of the solvent storage tank farm, the underground cistern and all contamination attributable to those units.

G.1. Corrective Action at the Facility OAC Rules 3745-50-10 & 3745-55-011

In accordance with OAC Rule 3745-50-10 "waste management unit" means any discernible unit at which wastes have been placed at any time, irrespective of whether the unit was intended for the management of waste or hazardous waste. Such units include any area at a Facility at which wastes have been routinely and systematically released. As used in this permit the term "waste management unit" shall be consistent with and equivalent to the term "solid waste management unit" as that term is defined in Section 3004(u) of RCRA.

The terms Interim Measure (IM), RCRA Facility Investigation (RFI), Corrective Measures Study (CMS) and Corrective Measure Implementation (CMI) are defined in Attachment 2, U.S. EPA's Corrective Action Plan (CAP).

The Permittee must institute Corrective Action as necessary to protect human health and the environment for all releases of hazardous waste(s) or hazardous constituent(s) from any waste management units (WMUs) at the Facility, regardless of the time at which waste was placed in such units.

G.2. Corrective Action Beyond the Facility Boundary OAC Rules 3745-55-011

The Permittee must implement Corrective Action(s) beyond the Facility property boundary, where necessary to protect human health and the environment, unless the Permittee demonstrates to the satisfaction of Ohio EPA that, despite the Permittee's best efforts, the Permittee was unable to obtain the necessary permission to undertake such actions. The Permittee is not relieved of all responsibility to clean up a release that has migrated beyond the Facility boundary where off-site access is denied. On-site measures to address such releases will be addressed under the RFI, CMS, and CMI phases, as determined to be necessary on a case-by-case basis.

G.3 <u>Identification of SWMUs</u> OAC Rules 3745-50-44(d) & 3745-55-011

As part of the CAFO with U.S. EPA, the following solid waste management units were identified by the Permittee in the document "Site Investigation Report Revision Number 1":

- (a) Solvent Tank Farm;
- (b) Chem Pack fill area;
- (c) Northwest fill area;

OHIO E.P.A.

OCT 30 98

U.S. EPA appeared to agree with the Permittee in a letter dated December 8, 1989 letter that no corrective actions were needed for the chem pack fill area, the northwest fill area, the neutralization pits, and the API tank basin.

The Permittee's corrective action obligations will continue, under Ohio cition authority, for all the units identified above should it be release may have occurred.

ESERVED

RA Facility In C. P.

G.4 RESERVED

G.5 RCRA Facility Investigation (RFI) OAC Rule 3745-55-011

The Permittee shall conduct an RFI to thoroughly evaluate the nature and extent of the release of hazardous waste(s) and hazardous constituent(s) from all applicable WMUs identified in Condition G.10 and, if deemed necessary by Ohio EPA, for WMUs identified in Condition G.3 above. The major tasks and required submittal dates are shown below. The scope of work for each of the tasks is found in Attachment B to this permit (U.S. EPA's CAP).

(a) RFI Workplan

The Permittee shall, in case of a newly discovered waste management unit, submit a written RFI Workplan to Ohio EPA on a time frame established by Ohio EPA.

- If necessary, Ohio EPA shall provide written comments on the RFI Workplan to (i) the Permittee.
- Within 45 days of receipt of Ohio EPA's comments, the Permittee shall submit either an amended or new RFI Workplan that incorporates Ohio EPA's comments.
- Ohio EPA shall approve or modify and approve, in writing, the amended or new RFI Workplan. The RFI Workplan, as approved or as modified and approved, shall be incorporated into this permit and become an enforceable condition of this permit. Subsequent changes to the approve RFI Workplan must be authorized by Ohio EPA.

00130 88

(b) RFI Implementation

OHIO E.P.A.

The Permittee shall implement the RFI Workplan according to the terms and schedule in the approved RFI Workplan.

(c) RFI Final Report

Within 60 days after the completion of the RFI, the Permittee shall submit an RFI Final Report to Ohio EPA. The RFI Final Report shall describe the procedures, methods, and results of the RFI. The Final Report must contain adequate information to support further decisions concerning corrective action at the Facility.

- (i) If necessary, Ohio EPA shall provide written comments on the RFI Report to the Permittee.
- (ii) Within 45 days of receipt of Ohio EPA's comments, the Permittee shall submit either an amended or new RFI Report that incorporates Ohio EPA's comments.
- (iii) Ohio EPA shall approve or modify and approve, in writing, the amended or new RFI Report. The RFI Report, as approved or as modified and approved, shall be incorporated into this permit and become an enforceable condition of this permit. Subsequent changes to the approve RFI Report must be authorized by Ohio EPA.

G.6 Interim Measures (IM)

Based on the RFI Final Report or other information documenting a release of hazardous waste or constituents to the environment, Ohio EPA may require the development and implementation of an interim measure (this may include an IM Workplan) at any time during the life of the permit to mitigate or eliminate a threat to human health or the environment. The Permittee shall begin implementation of such action within 30 days of the effective date of this permit on a timeframe established by Ohio EPA.

G.7 Determination of No Further Action

(a) Permit Modification

Based on the results of the completed RFI and other relevant information, the Permittee may submit an application to Ohio EPA for a Class 3 permit modification under OAC Rule 3745-50-51 to terminate the Corrective Action tasks of the Schedule of Compliance. Other tasks identified in the Schedule of Compliance shall remain in effect. This permit modification application must conclusively demonstrate that there are no releases of hazardous waste or constituents from WMUs at the Facility that pose a threat to human health and the environment.

If, based upon review of the Permittee's request for a permit modification, the results of the completed RFI, and other information, including comments received during the

Hukill Chemical Corporation Part B Permit Conditions Page 47 of 50

initial (60-day) public comment period required for Class 3 permit modifications, Ohio EPA determines that releases or suspected releases which were investigated either are nonexistent or do not pose a threat to human health and the environment, Ohio EPA will approve the requested modification.

(b) Periodic Monitoring

A determination of no further action shall not preclude Ohio EPA from requiring continued or periodic monitoring of air, soil, ground water, or surface water, if necessary to protect human health and the environment, when site-specific circumstances indicate that potential or actual releases of hazardous waste or constituents are likely to occur.

(c) Further Investigations

A determination of no further action shall not preclude Ohio EPA from requiring further investigations, studies, or remediation at a later date, if new information or subsequent analysis indicates that a release or likelihood of a release from a WMU at the Facility is likely to pose a threat to human health or the environment. In such a case, Ohio EPA shall initiate a modification to the terms of the permit to rescind the determination made in accordance with Permit Condition G.7.a. Additionally, in the event Ohio EPA determines that there is insufficient information on which to base a determination, the Permittee, upon notification, is required to perform additional investigations as needed.

G.8 Corrective Measures Study (CMS).

If Ohio EPA determines, based on the results of the RFI and any other relevant information, that corrective measures are necessary, Ohio EPA will notify the Permittee in writing that the Permittee shall conduct a CMS either as described below or as described in Ohio EPA's notification to the Permittee. The purpose of the CMS will be to develop and evaluate the corrective action alternative(s) and to outline one or more alternative corrective measure(s) that will satisfy the performance objectives specified by Ohio EPA.

(a) CMS Workplan

The Permittee shall submit a written CMS Workplan to Ohio EPA within 90 days from the notification by Ohio EPA of the requirement to conduct a CMS.

- (i) If necessary, Ohio EPA shall provide written comments on the CMS Report to the Permittee.
- (ii) Within 45 days of receipt of Ohio EPA's comments, the Permittee shall submit either an amended or new CMS Report that incorporates Ohio EPA's comments.

OHIO E.P.A

OCT 30 98

(b) CMS Workplan Implementation

The Permittee shall implement the CMS Workplan according to the terms and schedule in the approved CMS Workplan.

(c) CMS Final Report

Within 60 days after the completion of the CMS, the Permittee shall submit a CMS Final Report to Ohio EPA. The CMS Final Report shall summarize the results of the investigations for each remedy studied and must include and evaluation of each remedial alternative.

(i) If necessary, Ohio EPA shall provide written comments on the CMS Workplan to the Permittee.

Within 45 days of receipt of Ohio EPA's comments, the Permittee shall submit either an amended or new CMS Workplan that incorporates Ohio EPA's comments.

(iii) Ohio EPA shall approve or modify and approve, in writing, the amended or new CMS Workplan. The CMS Workplan, as approved or as modified and approved, shall be incorporated into this permit and become an enforceable condition of this permit. Subsequent changes to the approve CMS Workplan must be authorized by Ohio EPA.

G.9 Corrective Measures Implementation (CMI)

Based on the results of the CMS, the Permittee shall implement one or more of the Corrective Measures authorized by Ohio EPA. Ohio EPA shall authorize one or more of the Corrective Measures in the CMS, and shall notify the Permittee in writing of the decision. Ohio EPA will select a Corrective Measure for implementation based on the following factors: The Corrective Measure selected for implementation must: (1) be protective of human health and the environment; (2) attain media cleanup standards; (3) control the source(s) of releases so as to reduce or eliminate further releases of hazardous waste(s) (including hazardous constituent(s)); and (4) comply with all applicable standards for management of wastes.

If two or more of the Corrective Measures studied meet the threshold criteria set out above, Ohio EPA will authorize the Corrective Measures Implementation by considering remedy selection factors including: (1) long-term reliability and effectiveness; (2) the degree to which the Corrective Measure will reduce the toxicity, mobility or volume of contamination

CHIERED DIRECTOR'S JOURNAL

Hukill Chemical Corporation Part B Permit Conditions Page 49 of 50

(3) the Corrective Measure's short-term effectiveness; (4) the Corrective Measure's implementability; and (5) the relative cost associated with the alternative.

In authorizing the proposed Corrective Measure(s), Ohio EPA may also consider such other factors as may by presented by site-specific conditions.

(a) Permit Modification

Ohio EPA will initiate a permit modification, as provided by OAC Rule 3745-50-51 to require implementation of the corrective measure(s) authorized.

The Permittee shall not implement the corrective measure until the permit is modified pursuant to OAC Rule 3745-50-51.

(b) Financial Assurance OAC Rule 3745-55-011

As part of the modification of this permit to incorporate CMI, the Permittee shall provide financial assurance in the amount necessary to implement the corrective measure(s) as required by OAC Rule 3745-55-011 (B) and (C).

G.10 Newly Identified WMUs or Releases

OAC Rule 3745-55-011

(a) General Information

The Permittee shall submit to Ohio EPA, within 30 days of discovery, the following information regarding any new WMU identified at the Facility:

- (i) The location of the unit on the site topographic map;
- (ii) Designation of the type of unit;
- (iii) General dimensions and structural description (supply any available drawings);
- (iv) When the unit was operated; and
- (v) Specification of all waste(s) that have been managed at the unit.

(b) Release Information

The Permittee shall submit to Ohio EPA, within 30 days of discovery, all available information pertaining to any release of hazardous waste(s) or hazardous constituent(s) from any new or existing WMU.

OHIO E.P.A.

OCT 30 98

Hukill Chemical Corporation Part B Permit Conditions Page 50 of 50

G.11 Corrective Action for Newly Identified WMUs and Releases OAC Rule 3745-55-011

The Permittee shall submit a written RCRA Facility Investigation Workplan to Ohio EPA upon a timeframe established in written notification by Ohio EPA that further investigations or corrective measures are necessary.

Further investigations or corrective measures will be established by Ohio EPA.

Permittee shall make such submittal in accordance with timeframes established by Ohio EPA.

hccdrft2.101/AR.ao

OHIO E.P.A.

OCT 30 98

ENTERED DIRECTOR'S JOURNAL